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CHANGING TEACHER MORALE: AN EXPERIMENT IN FEEDBACK OF IDENTIFIED PROBLEMS OF TEACHERS AND PRINCIPALS. FINAL REPORT.

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This 2-year study attempted to determine whether feedback to teachers and principals about problems and tensions existing in their schools can be effective in changing morale for (1) teachers generally, (2) vocational teachers, (3) and nonvocational teachers. Relationships between teacher morale and such factors as age, sex, teaching experience, level of education, and major field were also examined. Principals and teachers (N=3,070) in 76 randomly chosen Indiana and Oregon high schools comprised the sample for the pretest-posttest control group design. The 10-component Purdue Teacher Opinionaire was used to measure morale. Statistical analysis of data revealed significant group differences. Contrary to expectations, however, all differences favored the control group. (Noncontrolled use of the feedback may have affected the results.) Patterns for nonvocational teachers followed those of the total group, but vocational teachers responded less favorably on the teacher-load factor and more favorably on the teacher- principal rapport factor. While findings concerning the relationships between personal characteristics and morale confirm the results of earlier studies, the 10-factor breakdown introduces some new dimensions. Included are a 16-item bibliography; 17 statistical tables; 13 comparison graphs; the Purdue Teacher Opinionaire; a sample of feedback profiles; and a list of cooperating schools, principals, and superintendents. (JS)

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INTRODUCTION

Morale is one of those phenomena that is greatly discussed and little understood. Even though morale has been extensively "researched" in industry and in the military, and to a lesser degree in the schools, the findings are often confusing and inconclusive. Wide disagreements exist as to how morale should be defined, as to the factors affecting morale, and the ways in which morale can be changed.

Progress is being made. Research efforts concerning teacher morale have been greatly intensified in recent years, and there is evidence that these efforts are becoming more highly coordinated and focused on common interests and understandings.

The importance of morale in the teaching-learning situation has long been recognized. Although the evidence is somewhat piecemeal, there is a growing body of theory and research that points to the importance of morale in bringing about student productivity and achievement. The professional interest and enthusiasm that a teacher displays in the classroom has a significant effect on the attitudes of the student to that teacher and the student's receptivity for learning. Thus the maintenance and improvement of teacher morale must be of primary concern to those who have leadership responsibilities in the schools.

PROBLEM

The project reported here is primarily concerned with changing teacher morale. Given a certain level of teacher morale in a particular school situation, can the morale be improved by definite and deliberate procedures? More specifically, can feedback to the teachers and principal about problems and tensions existing in their school situation be used to change morale? Is such feedback effective in stimulating individual and group efforts to alleviate tensions and overcome existing difficulties, thus bringing about an improvement in the level of morale?

Other purposes of the project include making morale comparisons between vocational and non-vocational teachers and determining whether a relationship exists between teacher morale and certain selected factors, e.g., sex, teaching experience, salary, teaching assignment.

RELATED THEORY AND RESEARCH

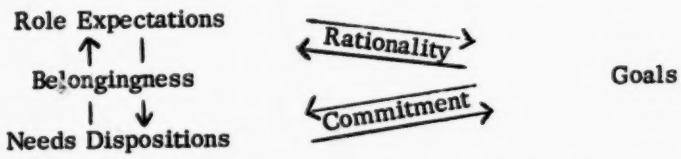
Morale Theory

Morale has been defined for research purposes according to the conceptual predilections of the researchers.

Some authorities consider morale to be the emotional and mental reaction of a person to his job. It may best be conceived of as a continuous variable. The level of morale is then determined by the extent to which an individual's needs are satisfied, and the extent to which the individual perceives satisfaction as stemming from the total job situation. High morale is evident when there is interest in and enthusiasm for the job. What is imporant in morale is what the person believes and feels, rather than the conditions that exist as perceived by others.

Recently, various analysts have been thinking of morale within the framework of organizational theory and the problems of "maintaining the organization." In this approach two components are usually involved: (1) perceived productivity and progress toward the achievement of the tasks of the organization (task-achievement), and (2) perceived job satisfaction or the satisfaction of individual needs through the interaction of the participant in his role within the work group and the total organization (needs-satisfaction) (Lonsdale, 1964).

The relationships between these two components have been conceptualized by Guba (1958). He discusses morale as the interaction and relationships among role-expectations, needs-dispositions, and institutional goals. The morale of the individual depends on how well he can integrate the goals of the institution with his own needs (commitment); how much he can anticipate satisfying role-expectations and personal needs-dispositions simultaneously (belongingness); how clearly he perceives logical appropriateness of his role expectations with the goals of the institution (rationality). Guba's concepts may be illustrated diagrammatically as follows:



Stogdill (1961) conceives morale as the degree of freedom from restraint exhibited by a group working toward a goal objective. The motivation of the individual and the group provides the potential for morale; however, the level of morale will be dependent both upon the strength of the motivation and the freedom to act.

Stogdill sees morale as only one of three group outputs, the other two being group productivity and group integration. Productivity refers to the outcomes that are designed to satisfy the expectations and values of the group as a whole. Productivity may have to be achieved at a cost to the satisfaction of individual values. Group integration represents the extent to which the group can maintain its structure and its operation under stress. The congruence of individual and group goals, a clearly differentiated role structure, and support of group leadership are the elements that contribute to group integration.

It can be seen that in terms of both theories morale is conceived as an effect related to the successful interaction among individual needs and incentives and organizational goals. These theoretical considerations support the conceptual definition of morale that we have used in our teacher morale studies (Rempel and Bentley, 1963; Bentley and Rempel, 1963):

> "Morale refers to the professional interest and enthusiasm that a person displays toward the achievement of individual and group goals in a given job situation."

This definition recognizes the satisfaction of both individual and group needs and their effective harmonization as the basis for morale. Given a certain task to be accomplished by the groups, "morale pertains to the factors in the individual's life that bring about a hopeful and energetic participation on his part so that his efforts enhance the effectiveness of the group in accomplishing the task in hand." (Child, 1941)

It is apparent that an important relationship exists between teacher morale, as we are defining it, and teacher mental health. Both depend on the fulfillment of personal and social goals. Ruth M. Strang (1960) defines the mentally healthy individual as one "who can pursue reasonable and purposeful objectives and can make fruitful use of his talents and abilities. He has a sense of self-respect, or self-reliance, and of achievement, and knows that he is liked or loved, and wanted. He has a sense of belonging and of being respected, and has learned to accept, respect, and love others. He has a sense of security and is reasonably at peace with himself and his environment."

Morale Change

The basic question that is asked in this study is this: "Can teacher morale be improved by certain kinds of feedback in particular school situations?" If a school staff is informed about such elements as the status of the teacher relationships with the principal, rapport among teachers, the degree of general satisfaction with teaching, and other factors generally assumed to affect morale, does such feedback significantly change the

level of teacher morale?

Furthermore, is it enough merely to supply such information to the staff or will greater changes be effected if the information is supplemented by an interpretive summary and analysis? Also, is it desirable to furnish a staff with pertinent literature and materials that may suggest courses of action and effective group problem-solving procedures?

Again, the rationale in the procedures used in the experiment stems from recent organizational theory, and more specifically what has often been called "equilibrium theory." According to this theory, organizations exist in a state of equilibrium. This equilibrium may be static; i.e., a balanced state wherein perceived units and experienced sentiments co-exist without stress, without pressure toward change (Heider, 1958). However, in a condition of dynamic equilibrium the system responds to stimuli or change in the environment by shifting to a new balance or by a modification of its goals (Lonsdale, 1964). It is such a dynamic equilibrium that is the desired state if the organization is to survive.

Very basic to ideas of organizational equilibrium is the concept of feedback. Gage et al (1960) uses an analogy that is appropriate here. A blindfolded person throwing a dart at a target will not get closer to the bull's-eye. Take off the blindfold and he improves. We say that the improvement is due to knowledge of results or "feedback." As applied to the organization, in order to learn the organization must have feedback. It needs information from the environment indicating how it is doing. The feedback can be used to show the operation and activities of the organization.

Pfiffner and Sherwood (1960) in discussing feedback in the context of cybernetics describe it as follows:

> In its simplest form, feedback is a kind of communication an actor receives from a live audience. If the crowd is enthusiastic, the performer reacts with similar enthusiasm.
>
> There is in a way a closed circuit between performer and audience with continuing interchange of information ... Essential to feedback is the notion that the flow of information is actually having a reciprocating effect on behavior. This is why the term loop is frequently used with feedback. This circular pattern involves the flow of information to the point of action with new information and perhaps instructions. A primary element in this process is the sensory organ, the instrument through which information is obtained. Until recently only the animal organism, particularly the human brain and nervous system, was sufficiently developed to possess this capacity.

One can think of the "sensory organs" of the organization as the individuals or groups within the administrative hierarchy who are assigned the roles of evaluating the information and then sending the proper signals

back to members of the organization so that behavior can be continued or modified. Of course if feedback is to work properly, the organization's "sensory" organs may have to be sensitized so as to decrease blockage and increase receptivity.

In a particular school situation, the organization exists in a state of equilibrium, either static or dynamic. To maintain a dynamic equilibrium among the social and interpersonal forces that impinge on the situation and to bring about desirable changes require adequate feedback. This feedback involves (1) the orderly collection of information about the functioning of the system, and (2) the reporting of this information into the system for (3) its use in making further adjustments.

Considerable research has been done in exploring the effectiveness of different procedures for changing attitudes, perceptions, and relationships among individuals in business and industrial organizations without changing the personnel of the units. A good summary of these findings and the implications is given by Mann (1963). Major findings which have a bearing on this study include:

(1) Change processes need to be concerned with altering both the forces within an individual and the forces in the organizational situation surrounding the individual.

(2) Organizations, as systems of hierarchically ordered, interlocking roles with rights and privileges, reciprocal expectations, and shared frames of reference, contain tremendous forces for stability or change in the behavior of individuals or subgroups. Change processes need to be designed to harness these forces for creating and supporting change. As forces already in existence, they must first be made pliable, then altered or shifted, and finally made stable again to support the change.

(3) Expectations of his superiors are more important forces for creating change in the individual than the expectations of his subordinates.

(4) Information about the functioning of a system may introduce a need for change. This is especially true when the new data are seen as objective and at variance with common perceptions and expectations. Change processes organized around objective, new social facts about one's own organizational situation have more force for change than those organized around general principles of human behavior. The more meaningful and

relevant the material, the greater likelihood of change.

(5) Involvement and participation in the planning, collection, analysis and interpretation of information initiate powerful forces for change. Own facts are better understood, more emotionally acceptable, and more likely to be utilized than those of some "outside expert." Participation in analysis and interpretation helps by-pass those resistances which arise from proceeding too rapidly or too slowly.

(6) Objective information on direction and magnitude of change -- knowledge of results -- facilitates further improvement. Change processes which furnish adequate knowledge on process and specify criteria against which to measure improvement are apt to be more successful in creating and maintaining change than those which do not.

Mann finally concludes that "providing personnel with a chance to participate in decisions concerning their own job performance is the most effective method of overcoming negative attitudes and building more useful ones. This is not to say that participation will always work, or even that it should always be tried. Furthermore, its effectiveness depends heavily on how it is done." It seems reasonable to expect that these findings will also hold true for administrators and teachers working in a school environment.

In a recent study by Daw and Gage (1967) it was found that the behavior of elementary school principals was favorably effected by the feedback of teachers' ratings of their actual and ideal principal on 12 items concerning principal behavior.

Morale Measurement

Many different instruments and devices to measure morale and job satisfaction have been developed. Some, supposedly, have general application to any kind of job; others have been prepared appropriate to a particular occupation, e.g., nursing, railroad work, government employment, etc. Scales have been developed at both Northwestern University and New York University designed specifically to measure teacher morale.

Usually the approach to the measurement of teacher morale consists of asking the individual to make qualitative judgments and express his feelings about the persons and things in the environment that may be related to his morale. These responses are appropriately weighted and quantified so that a total score or index can be obtained.

Most investigators of teacher morale have treated total scores as though morale was unidimensional, and yet one of the few points of agreement among recent investigators of morale is that morale is multidimensional. Also the practice of measuring morale in terms of an a priori definition assigned by the investigator is inadequate as a means of identifying and measuring the various dimensions of morale.

Perhaps the most promising approach to the problem of measuring teacher morale, at the present time, involves the use of factor analysis methods. This approach involves placing what is believed to measure morale into a correlational matrix and then using appropriate factorial methods to identify various factors or dimensions. Item factor loadings may be considered approximations of construct validity. Although there have been a number of studies of morale in industry and in the military setting using factor analysis, such studies are practically non-existent in the teacher morale area.

The Purdue Teacher Opinionaire (Morale Inventory), which was developed in 1961, consisted of 145 items selected and logically grouped to sample eight categories pertaining to the teacher and his school environment: (1) teaching as an occupation, (2) relationships with students, (3) relationships with other teachers, (4) administrative policies and procedures, (5) relationships with the community, (6) curriculum factors, (7) working conditions, and (8) economic factors. In the development of the instrument an experimental form was used and administered to a large representative sample of high school teachers. The final choice of items for the Teacher Opinionaire was based on internal consistency item analysis techniques. The Kuder-Richardson internal consistency reliability coefficients for the eight categories ranged from .79 to .98, with an overall reliability of .96. Efforts were also made to determine the validity of the instrument against a criterion of peer judgments made by fellow teachers. Mean scores for "high," "middle," and "low" peer judgment morale groups were statistically significant beyond the .05 level of significance (Bentley and Rempel, 1963)

The Opinionaire was then revised on the basis of comprehensive factor analysis studies (Rempel and Bentley, 1964) made with respect to the total teacher sample and also with respect to the "high," "middle," and "low" morale groups. These studies made it possible to define the dimensions of morale more clearly and to reduce the number of items from 145 to 100. The following morale categories were identified by the factor analyses: (1) teacher rapport with the principal, (2) satisfaction with teaching, (3) rapport among teachers, (4) teacher salary, (5) teacher load, (6) curriculum issues, (7) teacher status, (8) community support of educa-

tion, (9) school facilities and services, and (10) community pressures. It was the revised instrument (included in Appendix A) that was used in this study.

ASSUMPTIONS AND OBJECTIVES

The major questions to be answered in the study are the following:

(1) Does feedback of teacher identified problems make a significant difference in changing teacher morale in particular school situations for (a) teachers generally, (b) vocational teachers, and (c) non-vocational teachers?

(2) Do vocational teachers differ significantly from non-vocational teachers in the general level of morale and in terms of specific morale factors?

(3) Is there a relationship between teacher morale and such factors as age, sex, teaching experience, level of education, salary, and major teaching assignment?

A major assumption made in the study is that feedback about problems and tensions that have been identified by teachers in their school situation and feedback follow-up will stimulate group thinking and group problem solving procedures and thus result in improved morale. In other words, it is assumed that feedback about such items as principal-teacher rapport and the general satisfaction of teachers with their school environment would be effective factors in activating the principal and staff to improve group interaction and to work together more effectively in realizing individual and group goals.

METHODS

A two-year experimental study was conducted with the principals and teachers in 76 high schools in Indiana and Oregon. The schools were divided equally into two groups with an experimental group being subjected to certain morale feedback and follow-up procedures and a control group without such treatment. The Purdue Teacher Opinionaire was used to measure changes and to make comparisons in the level of morale for these two groups over a period of time. Particular attention was given to differences between vocational and non-vocational teachers. In addition to this, a study was made of the relationships of certain selected factors with teacher morale.

Population

Sixty Indiana and sixteen Oregon high schools were selected on the basis of the following criteria:

(1) Courses must be offered in at least two vocational areas such as vocational agriculture, business education, home economics, trade and industrial education, etc.

(2) The high school must be comprehensive in nature, with both vocational and non-vocational students enrolled.

(3) The high school must have a faculty of 20 or more classroom teachers.

The first criterion was selected because we were primarily interested in comparing the morale of vocational with non-vocational teachers who were employed and were working together in a common school and community environment. Criterion 2 was essential because most public high school vocational education is taught in comprehensive high school situations. The criterion regarding number of classroom teachers was selected because in many areas high schools having fewer than 20 teachers are rapidly being replaced by reorganized and larger high schools.

The 60 Indiana high schools were randomly selected from three stratified groups according to the number of teachers, (1) 20-29, (2) 30-49, and (3) 50 or more. The number of schools selected from the various groups was proportionate to the total number of schools in each group.

The 16 Oregon high schools were stratified on the same basis as the Indiana schools. However, it was possible to include all of the high schools in northeastern Oregon with 20 or more teachers. Since there were no high schools in northeastern Oregon having 50 or more teachers, a sample of four such high schools was randomly selected in northwestern Oregon.

The total population consisted of 3070 teachers -- 223 vocational and 2847 non-vocational.

General Design

A Pretest Posttest Experimental and Control Group Design was used. It may be illustrated diagrammatically as follows:

Group	Selection	Morale Pretests		Treatment	Morale Posttest
Total Experimental	Random	0_1	0_2	X	0_3
Total Control	Random	0_1	0_2	None	0_3
Vocational Experimental	Random	0_1	0_2	X	0_3
Vocational Control	Random	0_1	0_2	None	0_3
Non-Vocational Experimental	Random	0_1	0_2	X	0_3
Non-Vocational Control	Random	0_1	0_2	None	0_3

The Purdue Teacher Opinionaire was used for both pretests and also for the posttest. The treatment for the experimental group consisted of feeding back to the teachers and their principal detailed information based on teacher responses to the Opinionaire made at the first pretest.

In addition to studying the experimental effects of feedback on teacher morale, it was feasible to secure personal data about the teachers. Thus, the relationships between such factors as state, sex, age, teaching experience, degree held, salary, teaching assignment, and teacher morale were determined.

Procedure

The administrators of all the schools selected according to the procedures mentioned previously were contacted personally by one of the members of the research team to determine the willingness and ability of each of the schools to cooperate. Those schools unwilling or unable to participate were replaced by schools that were next in order of randomization. Actually, only eight replacements were required in Indiana and none in Oregon.

(1) Pretests

The two pretests (0_1 and 0_2) were conducted during the months of January and February of 1966. In every case one of the researchers met with the teachers as a group and administered the Opinionaire. The time interval between the two tests varied from two to four weeks.

(2) Feedback

Feedback based upon the responses of the teachers to the Opinionaire at the first administration was made to each of the experimental schools following the second pretest.

The principal and the faculty in each experimental school were provided with school profiles which compared their responses with those of the entire population (3070 teachers). Median school scores for each of the ten Opinionaire factors and the total score were plotted in relationship to the lower, middle, and upper quartiles for the total sample. In addition, similar profiles were prepared for median responses to each item within each factor. Sample profiles are included in Appendix B. These profiles in the form of colored slides became the basis for a presentation made by a member of the research team to each experimental school faculty.

Prior to feedback in the experimental schools, the principals were invited to meet with members of the research teams in each of the states. The meeting was to prepare the principals for the feedback presentation to their faculties. Sample profiles were used to illustrate the nature of the information and the kind of interpretive analysis that would be presented.

(3) Feedback Follow-up

Schools in the experimental group were asked and encouraged to engage in certain follow-up activities: (a) identify the problems they felt needed attention in their particular situation and prepare a proposed plan for dealing with these problems involving the entire faculty, (b) keep a diary of any activities related to the project initiated by the group, (c) report to the project director important changes and events in both the school and community which might have an effect on teacher morale, e.g. personnel changes, curriculum innovations, time schedule changes, buildings and facility improvements, etc., and (d) seek consultative assistance if deemed desirable from members of the research team.

To assist principals and their faculties in their follow-up activities each principal was provided with (a) a sample feedback follow-up plan, (b) a brief statement about the theory of morale change and morale measurement, and (c) a bibliography of references pertaining to teacher morale and the change process.

(4) Posttest

The posttest (0_3) administration took place approximately one year after the first pretest. Administration of the Opinionaire was handled in the same manner as for the pretests. In nearly all cases, the same researcher administered all three tests in a particular school.

(5) Personal Data Factors

Personal data relating to state, sex, age, teaching experience, degree held, salary, and major teaching assignment were collected from the Indiana and Oregon State Departments of Public Instruction. It was felt that such information would give further insights into teacher morale and factors associated with morale.

(6) Statistical Analysis

Scores on the Purdue Teacher Opinionaire served as the criterion measure for testing the major hypotheses of the study. Differences between means for experimental and control groups for both factor and total scores were tested by analysis of variance after adjusting posttest scores for initial pretest scores through analysis of covariance procedures.

The two pretests (0_1 and 0_2) made it possible to obtain test-retest reliability coefficients for both factor and total scores.

For each personal data category mean differences among factor and total morale scores were tested by analysis of variance procedures. Also the percentages of the teacher PTO scores distributed at the various stanine levels were determined for each category.

RESULTS

Study Populations

The total population consisted of 3194 teachers. The first administration of the Opinionaire included 96.27 percent (3075) of teachers in the total sample and the second administration included 94.61 percent

(3023). The posttest administration a year later included responses of 72.95 percent (2330) of the teachers who comprised the initial population.

PTO Reliability

The primary purpose of the second pretest (0_2) was to obtain further information regarding the stability of the PTO total and factor scores. The test-retest correlations are listed in Table 1.

Table 1. Test-Retest Correlations for Purdue Teacher Opinionaire Factor and Total Scores.

Factor (N=3023)	Correlation	Factor (N=3023)	Correlation
1 Teacher Rapport with Principal	.88	6 Curriculum Issues	.76
2 Satisfaction with Teaching	.84	7 Teacher Status	.81
3 Rapport among Teachers	.80	8 Community Support of Education	.78
4 Teacher Salary	.81	9 School Facilities and Services	.80
5 Teacher Load	.77	10 Community Pressures	.62
		Total Score	.87

In Table 2, a frequency distribution of individual school test-retest correlations for both factor and total scores is shown. It can be seen that the factor correlations are predominantly above the .60 level, and for the total scores about 90 percent of the correlations are .80 or above.

Table 2. Frequency Distribution of Test-Retest Correlations for Individual Schools By Factor and Total Scores. (Seventy-six Secondary Schools)

Correlations	Number of Correlations										
	1	2	3	4	5	6	7	8	9	10	Total
90-99*	25	16	8	4	-	1	5	3	1	2	23
80-89	32	47	26	31	29	21	38	18	21	2	46
70-79	17	5	32	27	33	21	22	24	35	14	4
60-69	1	5	8	12	9	24	11	22	11	24	3
50-59	1	3	1	1	3	7	-	6	8	21	-
40-49	-	-	1	1	2	1	-	1	-	9	-
30-39	-	-	-	-	-	1	-	-	-	2	-
20-29	-	-	-	-	-	-	-	1	-	1	-
10-19	-	-	-	-	-	-	-	1	-	1	-

* Decimals have been omitted.

Morale Changes for Experimental and Control Groups

The major thrust of the study was to determine the effect of feedback of problems identified by the Purdue Teacher Opinionaire in a given school situation on teacher morale. It will be recalled that schools were randomly assigned to experimental and control groups with the experimental schools receiving the feedback.

The effects of feedback and feedback follow-up are shown in Table 3. Comparisons of treatment means when adjusted on the basis of pretest scores between the experimental and control groups were significant for total PTO scores and for six of the ten factor scores. Contrary to our expectations, the differences favored the control rather than the experimental group. Factors for which significant differences occurred were teacher rapport with principal, satisfaction with teaching, rapport among teachers, teacher salary, curriculum issues, and community support of education. Non-significant differences were found for teacher load, teacher status, school facilities and services, and community pressures.

It should be noted that, although schools were randomly assigned to experimental and control groups, the pretest means of the two groups differed significantly beyond the .05 level for three of the PTO factors. However, since the pretest scores were highly reliable, it can be assumed that any pretest bias was eliminated by analysis of covariance.

Covariate analysis to study the effect of feedback was also made for vocational and non-vocational teachers treated as separate groups (See Tables 4 and 5). Differences between experimental and control groups for non-vocational teachers followed a pattern that was identical with that of the total group. For the vocational group, however, statistically significant differences were obtained for only two of the ten factors and for the total score. It must be remembered that the number of vocational teachers was only a small percent (7.25) of the total population. Actually, differences between adjusted means were greater (except in one instance) for the vocational group than for either the total group or the non-vocational group. With a larger population, the obtained differences would be just as significant, likely more so.

A graphical comparison of PTO teacher scores for total experimental and control groups is shown in Chart 1. A similar comparison of scores for vocational and non-vocational teachers appears in Chart 2.

Table 3. Comparison of Adjusted Mean PTO Factor and Total Scores of Total Experimental and Control Groups

Group	Number of Teachers	Pretest Mean	Treatment Mean	Adjusted Mean	S. E.	Difference	F-Ratio
	Factor 1. Teacher Rapport with Principal						
E	1073	62.76	61.12	61.08	.32		
C	1257	62.66	62.57	62.60	.29	1.52	12.33**
	Factor 2. Satisfaction with Teaching						
E	1073	69.39	68.30	68.10	.17		
C	1257	68.95	68.60	68.77	.16	.68	8.55**
	Factor 3. Rapport Among Teachers						
E	1073	45.43	44.79	44.79	.15		
C	1257	45.44	45.31	45.31	.14	.51	6.12*
	Factor 4. Teacher Salary						
E	1073	19.19	18.67	18.43	.12		
C	1257	18.55	18.71	18.92	.11	.50	9.72**
	Factor 5. Teacher Load						
E	1073	35.29	35.24	35.12	.14		
C	1257	34.98	35.13	35.24	.13	.12	.42
	Factor 6. Curriculum Issues						
E	1073	14.57	14.14	14.36	.08		
C	1257	15.12	14.84	14.65	.07	.29	6.99**
	Factor 7. Teacher Status						
E	1073	23.86	23.42	23.43	.11		
C	1257	23.88	23.71	23.70	.10	.27	3.54
	Factor 8. Community Support of Education						
E	1073	14.82	14.44	14.51	.08		
C	1257	14.98	14.92	14.86	.07	.36	12.10**
	Factor 9. School Facilities and Services						
E	1073	13.54	13.84	13.94	.08		
C	1257	13.78	13.95	13.87	.07	.11	.54
	Factor 10. Community Pressures						
E	1073	16.34	16.36	16.41	.07		
C	1257	16.46	16.56	16.52	.06	.11	1.45
	TOTAL						
E	1073	315.08	310.21	310.09	.83		
C	1257	314.81	314.31	314.42	.77	4.33	14.51**

* Significant at .05 level
** Significant at .01 level

Table 4. Comparison of Adjusted Mean PTO Factor and Total Scores of Non-Vocational Experimental and Control Groups

Group	Number of Teachers	Pretest Mean	Treatment Mean	Adjusted Mean	S. E.	Difference	F-Ratio
	Factor 1. Teacher Rapport with Principal						
E	989	62.68	61.11	61.03	.34		
C	1172	62.46	62.45	62.52	.31	1.49	10.73**
	Factor 2. Satisfaction with Teaching						
E	989	69.39	68.38	68.20	.18		
C	1172	69.00	68.62	68.76	.16	.56	5.48*
	Factor 3. Rapport among Teachers						
E	989	45.46	44.86	44.84	.16		
C	1172	45.40	45.27	45.29	.15	.45	4.43*
	Factor 4. Teacher Salary						
E	989	19.22	18.73	18.47	.12		
C	1172	18.54	18.71	18.93	.11	.46	7.61**
	Factor 5. Teacher Load						
E	989	35.49	35.44	35.28	.14		
C	1172	35.08	35.24	35.38	.13	.10	.27
	Factor 6. Curriculum Issues						
E	989	14.58	14.19	14.40	.08		
C	1172	15.11	14.82	14.64	.08	.24	4.50*
	Factor 7. Teacher Status						
E	989	23.87	23.47	23.47	.11		
C	1172	23.88	23.70	23.70	.10	.23	2.27
	Factor 8. Community Support of Education						
E	989	14.83	14.46	14.53	.08		
C	1172	14.99	14.92	14.86	.07	.33	9.59**
	Factor 9. School Facilities and Services						
E	989	13.59	13.89	13.99	.08		
C	1172	13.82	14.00	13.92	.07	.07	.45
	Factor 10. Community Pressures						
E	989	16.38	16.38	16.41	.07		
C	1172	16.47	16.56	16.54	.07	.12	1.68
	TOTAL						
E	989	315.41	310.92	310.63	.88		
C	1172	314.77	314.29	314.53	.81	3.90	10.73**

* Significant at .05 level
** Significant at .01 level

Table 5. Comparison of Adjusted Mean PTO Factor and Total Scores of Vocational Experimental and Control Groups

Group	Number of Teachers	Pretest Mean	Treatment Mean	Adjusted Mean	S. E.	Difference	F-Ratio
	Factor 1. Teacher Rapport with Principal						
E	84	63.61	61.14	61.74	1.00		
C	85	65.29	64.19	63.60	.99	1.85	1.73
	Factor 2. Satisfaction with Teaching						
E	84	69.39	67.40	66.86	.57		
C	85	68.26	68.42	68.96	.56	2.10	6.91*
	Factor 3. Rapport among Teacher						
E	84	45.10	44.02	44.34	.55		
C	85	45.87	45.86	45.55	.55	1.21	2.43
	Factor 4. Teacher Salary						
E	84	18.87	17.96	17.88	.39		
C	85	18.65	18.71	18.79	.39	.91	2.73
	Factor 5. Teacher Load						
E	84	32.90	32.80	33.05	.47		
C	85	33.64	33.65	33.40	.47	.34	.26
	Factor 6. Curriculum Issues						
E	84	14.44	13.60	13.93	.28		
C	85	15.34	15.13	14.80	.28	.88	5.00*
	Factor 7. Teacher Status						
E	84	23.65	22.86	22.94	.34		
C	85	23.85	23.84	23.75	.34	.80	2.74
	Factor 8. Community Support of Education						
E	84	14.64	14.12	14.23	.24		
C	85	14.89	14.99	14.88	.24	.65	3.72
	Factor 9. School Facilities and Services						
E	84	12.89	13.23	13.35	.27		
C	85	13.20	13.33	13.20	.27	.15	.15
	Factor 10. Community Pressures						
E	84	15.77	16.13	16.35	.28		
C	85	16.32	16.48	16.27	.28	.08	.04
	TOTAL						
E	84	311.30	301.93	303.76	2.61		
C	85	315.31	314.59	312.78	2.59	9.02	6.02*

* Significant at .05 level

Chart 1. Comparison of Adjusted Mean PTO Scores of Total Experimental and Control Groups.

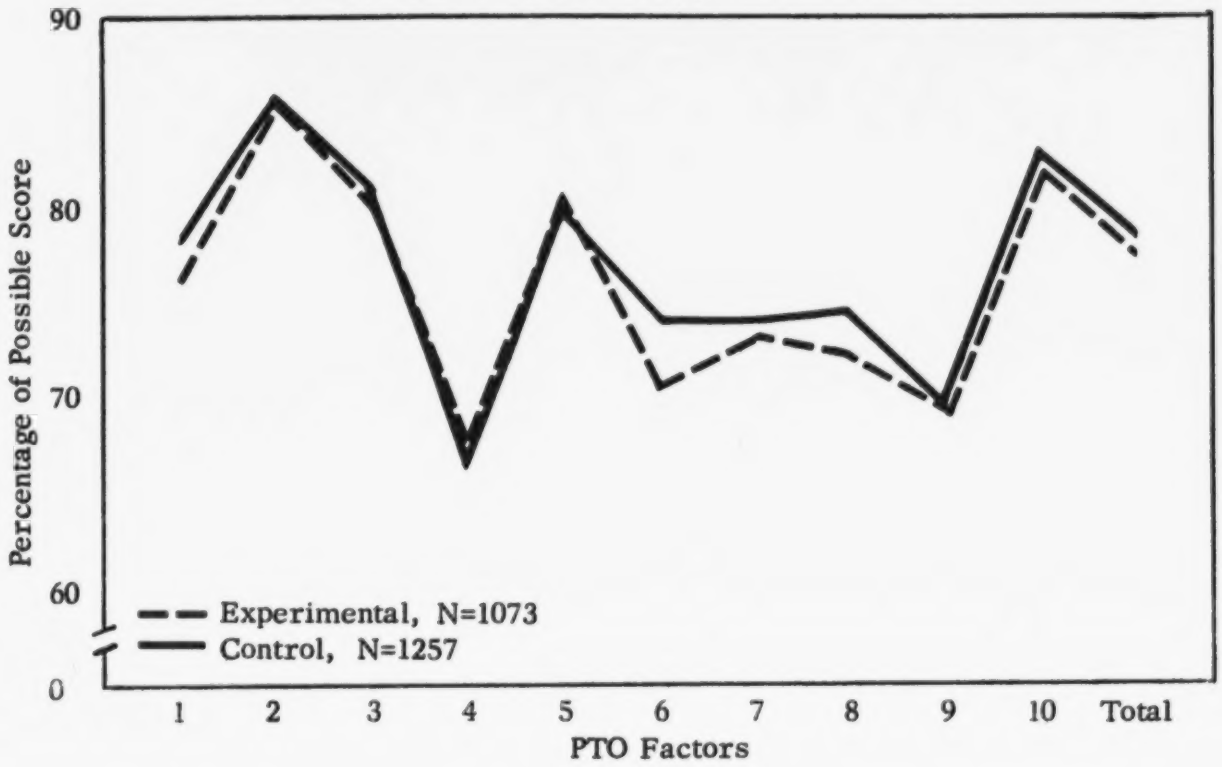
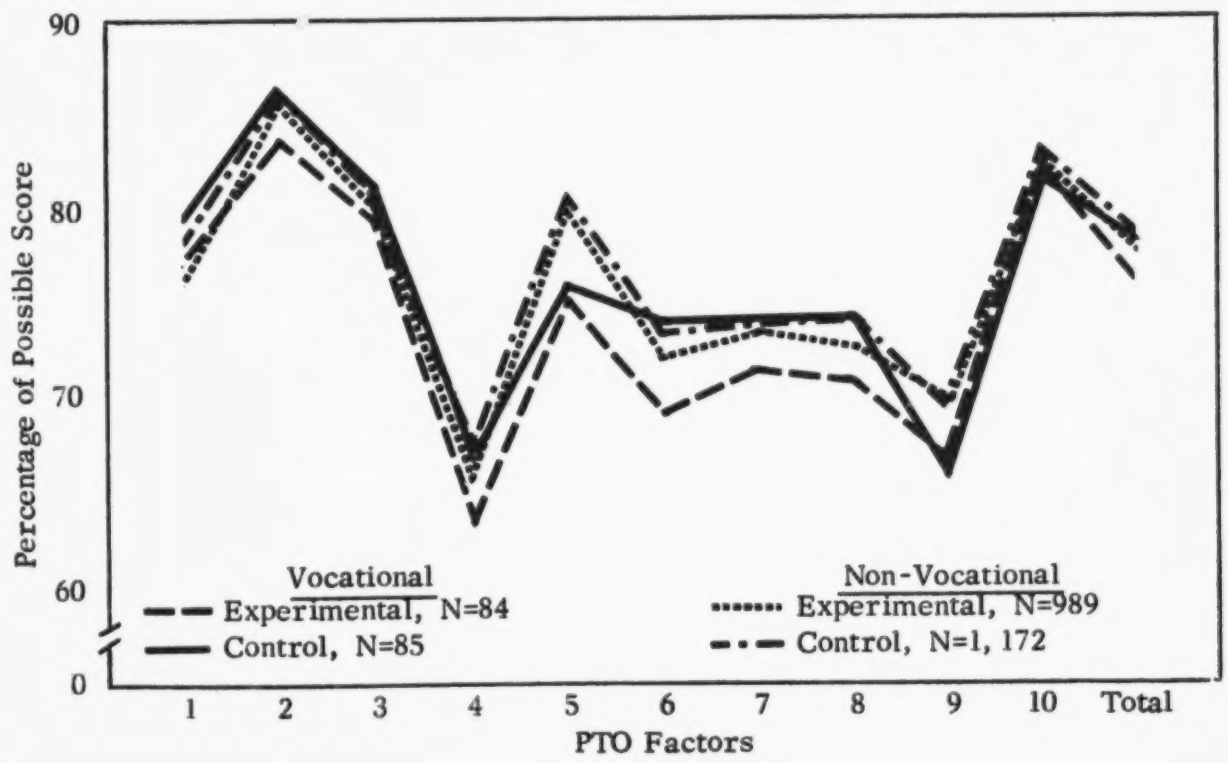


Chart 2. Comparison of Adjusted Mean PTO Scores of Vocational and Non-Vocational Experimental and Control Groups.



Morale Comparisons between Vocational and Non-Vocational Teachers

Mean comparisons based on the teacher population for the first administration of the Opinionaire between vocational and non-vocational teachers for each of the PTO factors and the total are given in Table 6. Differences for the total score and eight of the ten factors were non-significant. The greatest mean difference (significant at the .01 level) occurred with respect to teacher load with the vocational teachers reacting less favorably than the non-vocational teachers. Vocational teachers, however, were more favorable in their responses to items concerned with teacher-principal rapport (significant at .05 level). Graphic comparisons are presented in Chart 3.

For Indiana vocational teachers it was possible to compare the morale scores of the vocational agriculture, home economics, and other vocational teachers. All differences were non-significant except for Factor 1 (Rapport with Principal). In this category, vocational agriculture teachers had the lowest mean score with 59.82, home economics teachers came next with 62.09, and then the all other vocational teachers group was highest with 66.28 (Table 7). Also see Chart 13.

Relationship of Selected Factors to Teacher Morale

Data obtained from the first administration of the Purdue Teacher Opinionaire were used to study the relationship of selected factors to teacher morale.

(1) State

There was little difference in the mean total morale scores for Indiana and Oregon teachers (Table 8 and Chart 4). Significant differences occurred, however, for some of the factors. The Oregon teachers reacted more favorably to teacher salary, school facilities and services, community pressures, and community support of education. Differences were significant at the .01 level for the first three factors and at the .05 level for the last factor mentioned. Responses of Indiana teachers were more favorable (.05 level) to items pertaining to satisfaction with teaching.

Table 6. Comparison of Teacher PTO Scores of Vocational and Non-Vocational Groups

Group	Number of Cases	Percentage of PTO Scores by Stanine Level 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 1. Teacher Rapport with Principal						
Vocational	223	19	65	16	63. 62	12. 13	
Non-Vocational	2852	22	60	18	61. 29	13. 83	5. 96*
	Factor 2. Satisfaction with Teaching						
Vocational	223	28	54	18	67. 54	11. 45	
Non-Vocational	2852	30	54	16	67. 51	11. 92	0. 00
	Factor 3. Rapport among Teachers						
Vocational	223	22	64	14	44. 94	6. 44	
Non-Vocational	2852	25	55	20	55. 50	7. 74	1. 02
	Factor 4. Teacher Salary						
Vocational	223	17	56	27	18. 64	4. 93	
Non-Vocational	2852	18	51	31	18. 38	5. 29	0. 51
	Factor 5. Teacher Load						
Vocational	223	26	58	16	32. 75	6. 26	
Non-Vocational	2852	18	56	26	34. 53	6. 75	14. 50**
	Factor 6. Curriculum Issues						
Vocational	223	15	63	22	14. 80	3. 43	
Non-Vocational	2852	16	59	25	14. 77	3. 45	0. 02
	Factor 7. Teacher Status						
Vocational	223	20	60	20	23. 71	4. 60	
Non-Vocational	2852	22	56	22	23. 61	5. 36	0. 07
	Factor 8. Community Support of Education						
Vocational	223	20	58	22	15. 71	8. 29	
Non-Vocational	2852	22	54	25	15. 51	8. 12	0. 13
	Factor 9. School Facilities and Services						
Vocational	223	18	60	22	12. 84	4. 03	
Non-Vocational	2852	20	54	26	13. 11	4. 32	0. 78
	Factor 10. Community Pressures						
Vocational	223	31	51	18	15. 69	3. 53	
Non-Vocational	2852	25	52	23	15. 95	3. 80	1. 02
	TOTAL						
Vocational	223	18	66	16	305. 55	56. 60	
Non-Vocational	2852	24	53	23	303. 86	63. 21	0. 15

* Significant at . 05 level
** Significant at . 01 level

Table 7. Comparison of Teacher PTO Scores of Indiana Vocational Groups

Teacher Group	Number	Mean	Standard Deviation	F-Ratio
Factor 1. Teacher Rapport with Principal				
Vocational Agriculture	38	59.82	14.22	
Home Economics	70	62.09	13.35	
Other Vocational	94	66.28	9.55	4.85**
Factor 2. Satisfaction with Teaching				
Vocational Agriculture	38	68.47	8.97	
Home Economics	70	66.94	14.95	
Other Vocational	94	67.69	9.71	0.22
Factor 3. Rapport among Teachers				
Vocational Agriculture	38	44.26	6.67	
Home Economics	70	43.57	7.18	
Other Vocational	94	46.01	5.93	2.98
Factor 4. Teacher Salary				
Vocational Agriculture	38	17.89	5.57	
Home Economics	70	19.11	5.03	
Other Vocational	94	18.35	4.69	0.85
Factor 5. Teacher Load				
Vocational Agriculture	38	30.82	5.80	
Home Economics	70	32.89	7.31	
Other Vocational	94	33.53	5.42	2.60
Factor 6. Curriculum Issues				
Vocational Agriculture	38	14.16	3.91	
Home Economics	70	14.88	2.93	
Other Vocational	94	15.20	3.60	1.24
Factor 7. Teacher Status				
Vocational Agriculture	38	22.82	5.04	
Home Economics	70	24.60	4.54	
Other Vocational	94	25.26	4.45	2.47
Factor 8. Community Support of Education				
Vocational Agriculture	38	14.13	3.30	
Home Economics	70	16.13	12.46	
Other Vocational	94	15.87	6.46	0.72
Factor 9. School Facilities and Services				
Vocational Agriculture	38	12.39	3.91	
Home Economics	70	13.00	4.55	
Other Vocational	94	12.81	3.79	0.27
Factor 10. Community Pressures				
Vocational Agriculture	38	14.76	2.92	
Home Economics	70	15.28	4.69	
Other Vocational	94	16.15	2.84	2.83
TOTAL				
Vocational Agriculture	38	299.53	40.51	
Home Economics	70	296.79	78.85	
Other Vocational	94	312.73	44.60	1.69

** Significant at .01 level

Table 8. Comparison of PTO Scores of Indiana and Oregon Teachers

State	Number of Cases	Percentage of PTO Scores at Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 1. Teacher Rapport with Principal						
Indiana	2452	22	57	21	61. 67	13. 61	
Oregon	623	26	52	22	60. 64	14. 14	2. 81
	Factor 2. Satisfaction with Teaching						
Indiana	2452	21	57	22	67. 75	11. 52	
Oregon	623	24	55	21	66. 58	13. 18	4. 78*
	Factor 3. Rapport among Teachers						
Indiana	2452	24	54	22	44. 39	7. 52	
Oregon	623	19	55	26	44. 64	8. 15	0. 55
	Factor 4. Teacher Salary						
Indiana	2452	25	51	24	18. 21	5. 25	
Oregon	623	20	48	32	19. 11	5. 30	14. 63**
	Factor 5. Teacher Load						
Indiana	2452	22	52	26	34. 49	6. 64	
Oregon	623	23	51	26	34. 03	7. 10	2. 30
	Factor 6. Curriculum Issues						
Indiana	2452	18	58	24	14. 82	3. 41	
Oregon	623	22	55	23	14. 57	3. 57	2. 81
	Factor 7. Teacher Status						
Indiana	2452	23	53	24	23. 63	5. 34	
Oregon	623	22	56	22	23. 60	5. 19	0. 01
	Factor 8. Community Support of Education						
Indiana	2452	27	51	22	15. 35	7. 85	
Oregon	623	22	52	26	16. 22	9. 11	5. 69*
	Factor 9. School Facilities and Services						
Indiana	2452	25	53	22	12. 93	4. 22	
Oregon	623	18	50	22	13. 73	4. 58	17. 31**
	Factor 10. Community Pressures						
Indiana	2452	23	53	24	15. 84	3. 69	
Oregon	623	18	50	32	16. 30	4. 06	7. 46**
	TOTAL						
Indiana	2452	24	54	22	304. 48	60. 41	
Oregon	623	21	54	24	302. 04	71. 22	0. 75

* Significant at . 05 level
** Significant at . 01 level

(2) Sex

For four of the ten factors the morale scores of the women were significantly higher than the morale scores of the men (Table 9). Differences were highly significant for salary and status (Factors 4 and 7) with F-ratios of 67. 69 and 73. 75, and for satisfaction with teaching (Factor 2) the difference was significant at the . 05 level. In practically all of the factors the mean scores for the women were higher than the mean scores for the men, and for the total scores the mean differences were significant at the . 05 level. Also see Chart 5.

The primary morale differences between men and women teachers can be illustrated by referring to some of the items for which the greatest difference occurred:

9. I am satisfied with the policies under which pay raises are granted.

37. Teaching affords me the security I want in an occupation.

64. My teaching job enables me to provide a satisfactory standard of living for my family.

(3) Degree Held

Marked differences were observed in the mean morale scores between teachers holding the master's degree and those holding the bachelor's degree (Table 10 and Chart 6). The master's degree teachers had a mean total score of 307. 73 as compared with a mean total score of 301. 07 for bachelor's degree teachers, the difference being significant at the . 01 level. Mean differences were also significant at the . 01 level in favor of the teachers with master's degrees for satisfaction with teaching, curriculum issues, school facilities and services, and community pressures (Factors 2, 6, 9, and 10). Differences at the . 05 level favoring master's degree teachers were found for teacher rapport with principal and teacher load (Factors 1 and 5).

(4) Age

Age groups were found to differ significantly at the . 01 level for each factor and for total score (Table 11). For the majority of the teachers, there was a gradual upward progression in the level of morale with increasing age. In some instances (Factors 4, 5, 6)

Table 9. Comparison of Teacher PTO Scores by Sex Groups

Sex	Number of Cases	Percentage of PTO Scores by Stanine Levels 1,2,3	4,5,6	7,8,9	Mean	S. D.	F-Ratio
	Factor 1. Teacher Rapport with Principal						
Male	1846	23	58	19	61.49	13.46	
Female	1224	24	53	23	61.51	14.12	0.00
	Factor 2. Satisfaction with Teaching						
Male	1846	25	57	18	67.14	11.76	
Female	1224	19	57	24	68.09	11.98	4.75*
	Factor 3. Rapport among Teachers						
Male	1846	23	56	21	44.40	7.59	
Female	1224	24	52	24	44.50	7.74	0.13
	Factor 4. Teacher Salary						
Male	1846	27	51	22	17.75	5.22	
Female	1224	18	50	32	19.34	5.20	67.69**
	Factor 5. Teacher Load						
Male	1846	23	52	25	34.30	6.69	
Female	1224	21	52	27	34.56	6.78	1.07
	Factor 6. Curriculum Issues						
Male	1846	19	59	22	14.71	3.42	
Female	1224	18	57	25	14.84	3.49	1.64
	Factor 7. Teacher Status						
Male	1846	26	56	18	22.96	5.32	
Female	1224	17	53	30	24.62	5.13	73.75**
	Factor 8. Community Support of Education						
Male	1846	25	52	23	15.53	7.58	
Female	1224	28	50	22	15.45	8.65	0.08
	Factor 9. School Facilities and Services						
Male	1846	22	54	24	13.11	4.25	
Female	1224	24	51	25	13.07	4.37	0.06
	Factor 10. Community Pressures						
Male	1846	24	54	22	15.82	3.75	
Female	1224	21	50	29	16.11	3.79	4.63*
	TOTAL						
Male	1846	25	54	21	302.19	62.08	
Female	1224	21	53	26	306.93	63.21	4.22*

* Significant at .05 level
** Significant at .01 level

Table 10. Comparison of Teacher PTO Scores by Degree Held

Degree	Number of Cases	Percentage of PTO Scores by Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 1. Teacher Rapport with Principal						
Bachelor's	1683	24	57	19	61.01	13.70	
Master's	1391	23	53	24	62.02	13.74	4.13*
	Factor 2. Satisfaction with Teaching						
Bachelor's	1683	24	57	19	66.74	12.10	
Master's	1391	19	57	24	68.48	11.48	16.49**
	Factor 3. Rapport among Teachers						
Bachelor's	1683	23	54	23	44.35	7.72	
Master's	1391	23	54	23	44.56	7.56	0.60
	Factor 4. Teacher Salary						
Bachelor's	1683	24	51	25	18.34	5.24	
Master's	1391	24	50	26	18.47	5.31	0.48
	Factor 5. Teacher Load						
Bachelor's	1683	23	52	25	34.16	6.81	
Master's	1391	21	52	27	34.70	6.62	4.88*
	Factor 6. Curriculum Issues						
Bachelor's	1683	20	58	22	14.61	3.48	
Master's	1391	18	57	25	14.96	3.40	7.94**
	Factor 7. Teacher Status						
Bachelor's	1683	23	55	22	23.57	5.28	
Master's	1391	22	53	25	23.68	5.34	0.31
	Factor 8. Community Support of Education						
Bachelor's	1683	29	51	20	15.29	8.37	
Master's	1391	23	52	25	15.75	7.57	2.55
	Factor 9. School Facilities and Services						
Bachelor's	1683	25	53	22	12.80	4.35	
Master's	1391	21	52	27	13.44	4.20	16.97**
	Factor 10. Community Pressures						
Bachelor's	1683	25	52	23	15.69	3.88	
Master's	1391	19	53	28	16.24	3.60	16.33**
	TOTAL						
Bachelor's	1683	24	55	21	301.07	63.84	
Master's	1391	21	53	26	307.73	60.71	8.67**

* Significant at .05 level
** Significant at .01 level

Table 11. Comparison of Teacher PTO Scores by Age Groups

Age	Number of Cases	Percentage of PTO Scores by Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 1. Teacher Rapport with Principal						
25 or less	625	19	75	6	59.31	14.00	
26-35	930	26	60	14	59.77	13.61	
36-45	639	25	52	23	61.79	13.59	
46-55	460	15	53	32	64.80	12.77	
56 or more	416	18	51	31	64.52	13.55	19.91**
	Factor 2. Satisfaction with Teaching						
25 or less	625	45	50	5	65.65	12.49	
26-35	930	24	57	19	66.75	11.97	
36-45	639	22	55	23	67.81	11.95	
46-55	460	18	55	27	68.67	11.60	
56 or more	416	11	62	27	70.34	9.99	12.09**
	Factor 3. Rapport among Teachers						
25 or less	625	26	65	9	43.61	7.69	
26-35	930	26	55	19	43.65	7.87	
36-45	639	23	53	25	44.66	7.21	
46-55	460	19	52	29	45.55	7.59	
56 or more	416	19	52	29	45.90	7.43	10.76**
	Factor 4. Teacher Salary						
25 or less	625	11	61	28	18.06	4.97	
26-35	930	30	52	18	17.31	5.18	
36-45	639	23	51	25	18.36	5.22	
46-55	460	19	47	34	19.50	5.28	
56 or more	416	18	40	42	20.08	5.36	27.02**
	Factor 5. Teacher Load						
25 or less	625	18	64	18	34.16	6.78	
26-35	930	24	56	20	33.83	6.59	
36-45	639	21	51	28	34.67	6.84	
46-55	460	19	50	31	35.03	6.55	
56 or more	416	22	50	28	34.97	6.86	3.89**
	Factor 6. Curriculum Issues						
25 or less	625	10	68	22	14.75	3.43	
26-35	930	22	57	21	14.48	3.53	
36-45	639	21	56	24	14.71	3.51	
46-55	460	15	62	23	15.00	3.38	
56 or more	416	14	60	26	15.32	3.17	4.84**
	Factor 7. Teacher Status						
25 or less	625	20	68	12	23.67	4.96	
26-35	930	27	55	18	22.67	5.37	
36-45	639	23	55	22	23.49	5.35	
46-55	460	19	49	32	24.43	5.59	
56 or more	416	15	50	35	24.94	4.84	17.10**

Table 11. (continued)

Age	Number of Cases	Percentage of PTO Scores by Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 8. Community Support of Education						
25 or less	625	21	58	21	14. 94	9. 36	
26-35	930	30	54	16	15. 05	8. 34	
36-45	639	23	54	23	15. 60	7. 24	
46-55	460	21	47	32	16. 39	8. 12	
56 or more	416	19	48	33	16. 19	5. 74	3. 72**
	Factor 9. School Facilities and Services						
25 or less	625	14	65	21	12. 43	4. 31	
26-35	930	25	54	21	12. 75	4. 24	
36-45	639	25	51	24	13. 10	4. 33	
46-55	460	20	52	28	13. 37	4. 33	
56 or more	416	14	49	37	14. 53	3. 97	17. 79**
	Factor 10. Community Pressures						
25 or less	625	38	51	11	15. 24	3. 91	
26-35	930	26	54	20	15. 57	3. 79	
36-45	639	20	50	30	16. 29	3. 68	
46-55	460	16	49	35	16. 60	3. 67	
56 or more	416	16	52	32	16. 51	3. 47	15. 28**
	TOTAL						
25 or less	625	24	64	12	295. 63	64. 81	
26-35	930	27	57	16	296. 36	62. 30	
36-45	639	23	54	23	305. 59	62. 17	
46-55	460	15	52	33	314. 41	62. 82	
56 or more	416	16	49	35	320. 31	54. 84	16. 96**

** Signifcant at . 01 level

Chart 3. Comparison of Mean PTO Scores of Vocational and Non-Vocational Teachers.

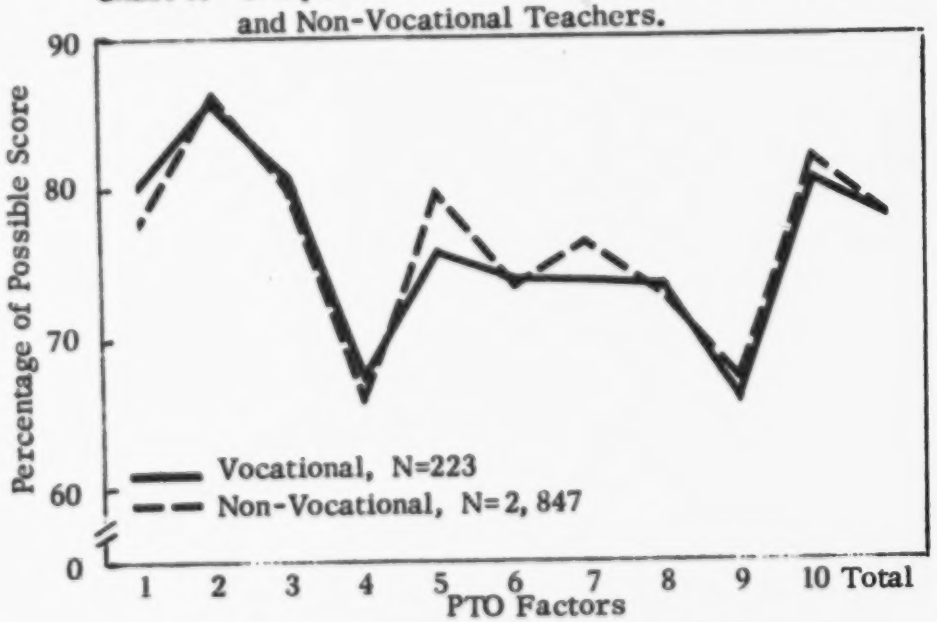


Chart 4. Comparison of Mean PTO Scores of Indiana and Oregon Teachers.

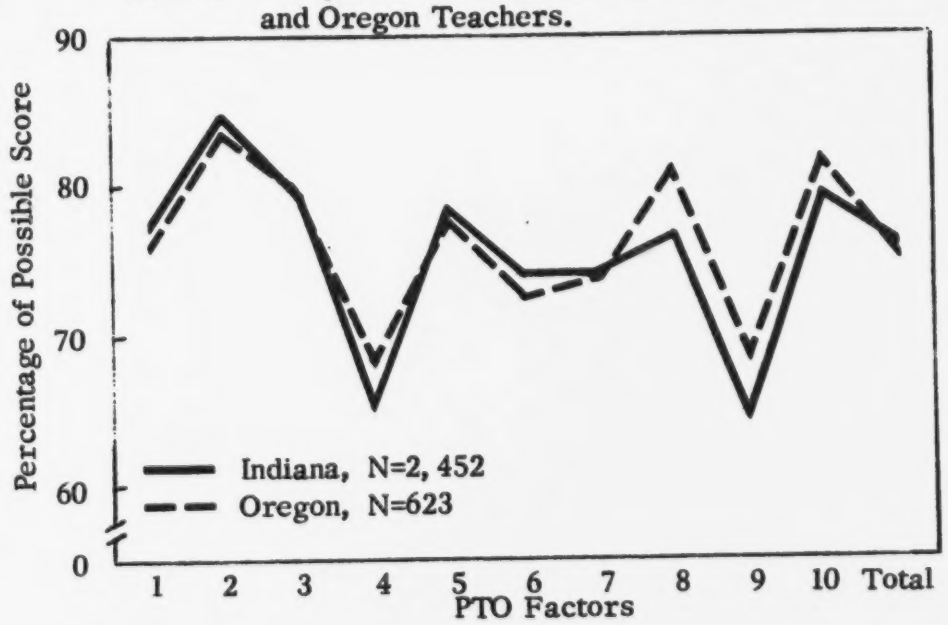


Chart 5. Comparison of Mean PTO Scores of Male and Female Teachers.

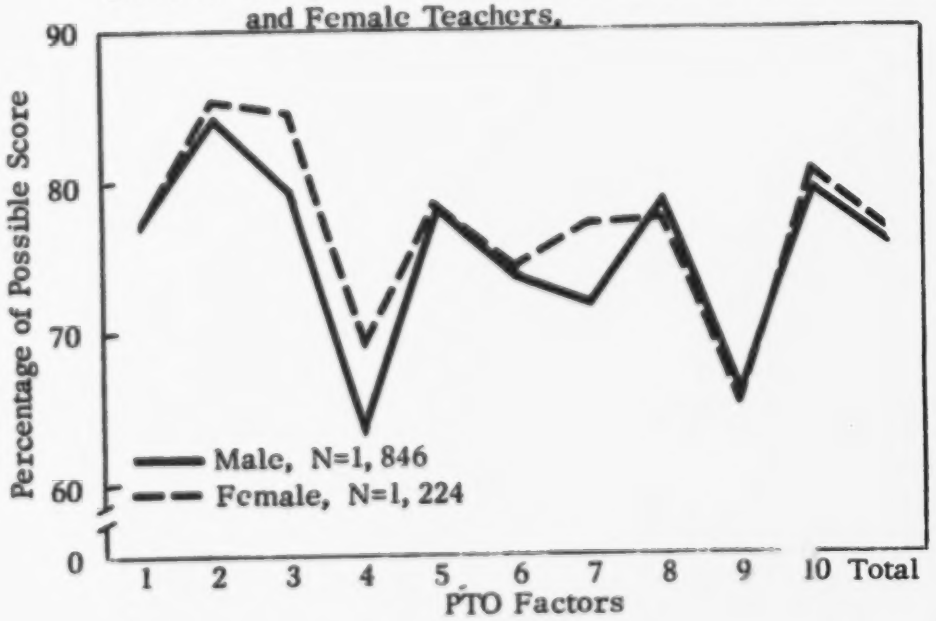
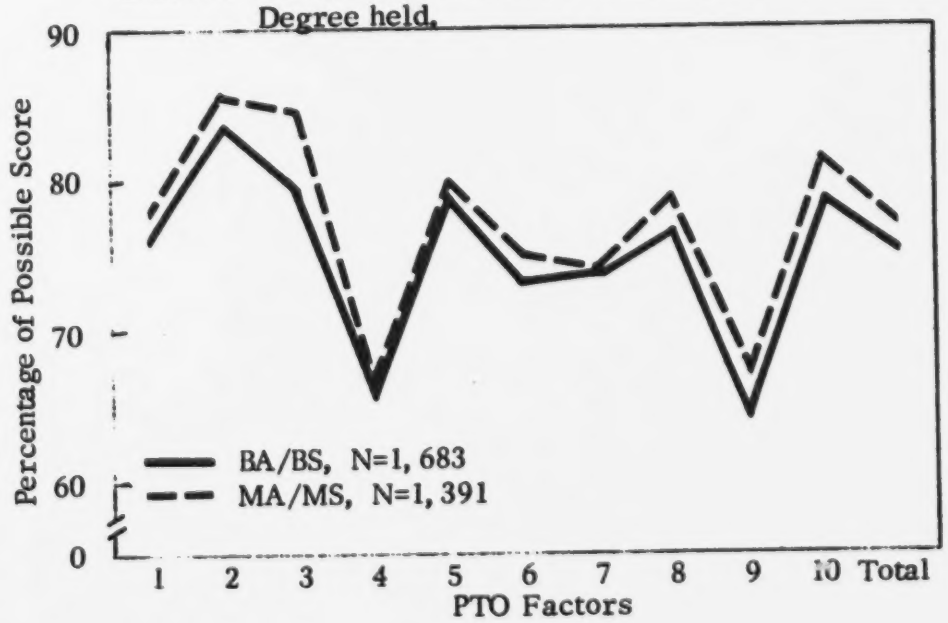


Chart 6. Comparison of Mean PTO Scores by Degree held.



the level of morale for the 26-35 age category was lower than for teachers 25 years or less, but beyond this point the morale gradually increased with age.

It is interesting to note in Table 11 that the percentage distribution of PTO scores at various stanine levels differs widely for different age groups. Scores for teachers 25 years or less tend to cluster in the middle stanines; for teachers 26-35 the scores are more heavily concentrated in the lower and middle stanines; 36-45 age group scores are normally distributed; and for teachers past 45 the scores tend to cluster in the upper stanines.

Profiles for age group comparisons are shown in Chart 7.

(5) Size of the Faculty

It can be observed from Table 12 that although the means for total scores were almost identical for the three teacher groups when classified according to faculty size, yet significant differences were found to exist for five of the ten morale factors. (Also see Chart 8.) Teachers in the largest high schools (50 or more teachers) responded more favorably to items concerning salary, curriculum, community support of education, and facilities and services than the teachers in the smaller high schools. However, with respect to teacher load, the responses of the 50+ teacher group were less favorable than the responses of the other two groups. For the salary factor, the 30-49 teacher schools scored significantly lower than the 20-29 and 50+ teacher schools.

(6) Teaching Experience

Results obtained indicate that teacher morale is significantly related to the total years of experience. Differences among the five experience groups (see Table 13) were significant at the .01 level for all of the factors except 5 (Teacher Load) and 8 (Community Support of Education) and these were significant at the .05 level. It can be observed that in most instances the means either drop slightly or increase slightly when moving from the 1-3 years to the 4-9 years experience category. Beyond this point there are usually sharp increases in morale for the other experience categories.

When comparisons were made for teaching experience in present position, the pattern of differences was very similar (Table 14) to those for total teaching experience. The only

Table 12. Comparison of Teacher PTO Scores by Size of Faculty

Size of Faculty	Number of Cases	Percentage of PTO Scores at Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 1. Teacher Rapport with Principal						
20-29	1167	24	55	21	60. 95	14. 33	
30-49	1019	22	55	23	62. 25	13. 48	
50+	889	23	57	20	61. 24	13. 16	2. 60
	Factor 2. Satisfaction with Teaching						
20-29	1167	21	59	20	67. 63	11. 80	
30-49	1019	22	56	22	67. 65	11. 42	
50+	889	22	56	22	67. 19	12. 51	0. 45
	Factor 3. Rapport among Teachers						
20-29	1167	23	52	25	44. 57	7. 69	
30-49	1019	24	54	22	44. 30	7. 74	
50+	889	20	58	22	44. 43	7. 50	0. 34
	Factor 4. Teacher Salary						
20-29	1167	22	48	30	18. 78	5. 41	
30-49	1019	29	51	20	17. 58	5. 26	
50+	889	21	52	27	18. 82	4. 98	18. 68**
	Factor 5. Teacher Load						
20-29	1167	20	52	28	34. 79	6. 72	
30-49	1019	23	53	24	34. 42	6. 60	
50+	889	23	54	23	33. 87	6. 88	4. 70**
	Factor 6. Curriculum Issues						
20-29	1167	23	59	18	14. 20	3. 49	
30-49	1019	20	58	22	14. 65	3. 43	
50+	889	12	54	34	15. 66	3. 23	47. 25**
	Factor 7. Teacher Status						
20-29	1167	24	52	24	23. 46	5. 49	
30-49	1019	23	53	24	23. 55	5. 33	
50+	889	30	58	22	23. 92	5. 03	1. 99
	Factor 8. Community Support of Education						
20-29	1167	29	48	23	15. 25	7. 77	
30-49	1019	28	51	21	15. 27	7. 22	
50+	889	21	55	24	16. 17	9. 45	3. 98*
	Factor 9. School Facilities and Services						
20-29	1167	23	53	24	13. 02	4. 27	
30-49	1019	29	51	20	12. 55	4. 28	
50+	889	16	54	30	13. 80	4. 27	20. 47**

Table 12. (continued)

Size of Faculty	Number of Cases	Percentage of PTO Scores at Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 10. Community Pressures						
20-29	1167	26	49	25	15. 80	3. 79	
30-49	1019	20	55	25	16. 00	3. 61	
50+	889	19	54	27	16. 03	3. 93	1. 20
	TOTAL						
20-29	1167	25	52	23	303. 74	62. 17	
30-49	1019	24	53	23	303. 86	59. 94	
50+	889	19	58	23	304. 44	66. 60	0. 03

* Significant at . 05 level
** Significant at . 01 level

Table 13. Comparison of Teacher PTO Scores by Total Years of Teaching Experience

Experience (no. of yrs.)	Number of Cases	Percentage of PTO Scores by Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 1. Teacher Rapport with Principal						
1-3	929	25	58	17	60. 11	13. 71	
4-9	783	26	59	15	59. 95	13. 52	
10-19	726	24	52	24	61. 84	14. 17	
20-29	355	16	53	31	64. 80	12. 48	
30+	282	16	50	34	65. 04	13. 32	15. 07**
	Factor 2. Satisfaction with Teaching						
1-3	929	27	57	16	66. 31	11. 78	
4-9	783	24	56	20	66. 48	12. 75	
10-19	726	19	55	26	68. 22	12. 09	
20-29	355	16	62	22	69. 39	9. 02	
30+	282	10	59	31	70. 29	11. 18	10. 76**
	Factor 3. Rapport among Teachers						
1-3	929	24	56	20	44. 06	7. 66	
4-9	783	24	56	20	43. 70	7. 94	
10-19	726	22	53	25	44. 75	7. 42	
20-29	355	20	51	29	45. 49	7. 47	
30+	282	20	52	28	45. 68	7. 24	6. 32**
	Factor 4. Teacher Salary						
1-3	929	23	54	23	18. 31	5. 00	
4-9	783	29	52	19	17. 49	5. 18	
10-19	726	24	48	28	18. 54	5. 44	
20-29	355	18	48	34	19. 32	5. 37	
30+	282	21	42	37	19. 65	5. 35	12. 98**
	Factor 5. Teacher Load						
1-3	929	22	53	25	34. 30	6. 64	
4-9	783	22	56	22	33. 87	6. 76	
10-19	726	22	50	28	34. 52	6. 94	
20-29	355	21	51	28	35. 08	6. 16	
30+	282	21	50	29	35. 07	6. 96	2. 93*
	Factor 6. Curriculum Issues						
1-3	929	19	56	25	14. 73	3. 51	
4-9	783	22	57	21	14. 49	3. 48	
10-19	726	21	55	24	14. 65	3. 55	
20-29	355	14	63	23	15. 02	3. 18	
30+	282	9	62	29	15. 70	3. 00	7. 18**
	Factor 7. Teacher Status						
1-3	929	23	56	21	23. 53	5. 02	
4-9	783	26	55	19	22. 92	5. 46	
10-19	726	24	52	24	23. 50	5. 48	
20-29	355	18	54	28	24. 28	5. 25	
30+	282	14	47	39	25. 31	4. 98	12. 27**

Table 13. (continued)

Experience (no. of yrs.)	Number of Cases	Percentage of PTO Scores by Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 8. Community Support of Education						
1-3	929	34	49	17	14. 90	8. 82	
4-9	783	27	55	18	15. 47	8. 97	
10-19	726	24	52	24	15. 67	7. 55	
20-29	355	18	50	32	15. 88	5. 12	
30+	282	17	48	35	16. 62	6. 33	2. 97*
	Factor 9. School Facilities and Services						
1-3	929	27	55	18	12. 57	4. 23	
4-9	783	24	54	22	12. 74	4. 33	
10-19	726	24	50	26	13. 14	4. 37	
20-29	355	18	52	30	13. 77	3. 92	
30+	282	11	47	42	14. 80	4. 19	18. 46**
	Factor 10. Community Pressures						
1-3	929	28	53	19	15. 53	3. 76	
4-9	783	26	51	23	15. 58	3. 97	
10-19	726	19	52	29	16. 17	3. 81	
20-29	355	13	56	31	16. 83	2. 83	
30+	282	15	50	35	16. 54	3. 82	12. 09**
	TOTAL						
1-3	929	26	56	18	299. 36	61. 31	
4-9	783	26	56	18	296. 17	66. 14	
10-19	726	22	52	26	305. 54	64. 61	
20-29	355	18	52	30	318. 18	47. 13	
30+	282	12	49	39	320. 13	61. 95	13. 95**

* Significant at . 05 level
** Significant at . 01 level

Table 14. Comparison of Teacher PTO Scores by Years of Experience in Present Position

Experience (no. of yrs.)	Number of Cases	Percentage of PTO Scores by Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 1. Teacher Rapport with Principal						
1-3	1607	23	58	19	61. 02	13. 65	
4-9	784	27	54	19	60. 12	14. 11	
10-19	412	23	51	26	62. 82	13. 54	
20+	271	14	50	36	65. 98	12. 22	14. 36**
	Factor 2. Satisfaction with Teaching						
1-3	1607	24	57	19	66. 63	12. 13	
4-9	784	20	58	22	67. 73	12. 16	
10-19	412	18	55	27	68. 69	11. 31	
20+	271	13	57	30	70. 52	9. 14	10. 30**
	Factor 3. Rapport among Teachers						
1-3	1607	23	55	22	44. 21	7. 76	
4-9	784	24	54	22	44. 18	7. 83	
10-19	412	21	55	24	44. 85	7. 25	
20+	271	20	52	28	46. 01	6. 78	5. 00**
	Factor 4. Teacher Salary						
1-3	1607	22	54	24	18. 45	5. 08	
4-9	784	31	44	25	17. 75	5. 54	
10-19	412	24	48	28	18. 57	5. 42	
20+	271	19	45	36	19. 66	5. 09	9. 39**
	Factor 5. Teacher Load						
1-3	1607	22	53	25	34. 33	6. 62	
4-9	784	24	50	26	34. 09	7. 14	
10-19	412	21	52	27	34. 72	6. 68	
20+	271	19	53	28	35. 30	6. 12	2. 54
	Factor 6. Curriculum Issues						
1-3	1607	20	56	24	14. 61	3. 52	
4-9	784	20	58	22	14. 74	3. 42	
10-19	412	18	58	24	14. 81	3. 45	
20+	271	7	63	30	15. 79	2. 87	9. 24**
	Factor 7. Teacher Status						
1-3	1607	24	55	21	23. 35	5. 25	
4-9	784	24	55	21	23. 32	5. 36	
10-19	412	20	52	28	24. 02	5. 49	
20+	271	12	48	40	25. 48	4. 81	14. 30**
	Factor 8. Community Support of Education						
1-3	1607	30	51	19	15. 16	8. 53	
4-9	784	26	52	22	15. 66	8. 00	
10-19	412	19	52	29	15. 87	7. 03	
20+	271	15	49	36	16. 45	6. 03	2. 63*

Table 14. (continued)

Experience (no. of yrs.)	Number of Cases	Percentage of PTO Scores by Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 9. School Facilities and Services						
1-3	1607	25	54	21	12. 72	4. 29	
4-9	784	23	54	25	13. 21	4. 34	
10-19	412	23	49	28	13. 34	4. 26	
20+	271	13	52	35	14. 58	3. 85	15. 74**
	Factor 10. Community Pressures						
1-3	1607	25	53	22	15. 66	3. 83	
4-9	784	24	50	26	15. 85	3. 89	
10-19	412	14	54	32	16. 56	3. 46	
20+	271	14	51	35	16. 90	3. 17	12. 99**
	TOTAL						
1-3	1607	25	55	20	300. 65	63. 54	
4-9	784	24	54	22	301. 03	64. 37	
10-19	412	21	51	28	309. 99	60. 58	
20+	271	11	49	40	324. 30	48. 08	13. 06**

* Significant at . 05 level
** Significant at . 01 level

Chart 7. Comparison of Mean PTO Scores by Age Groups

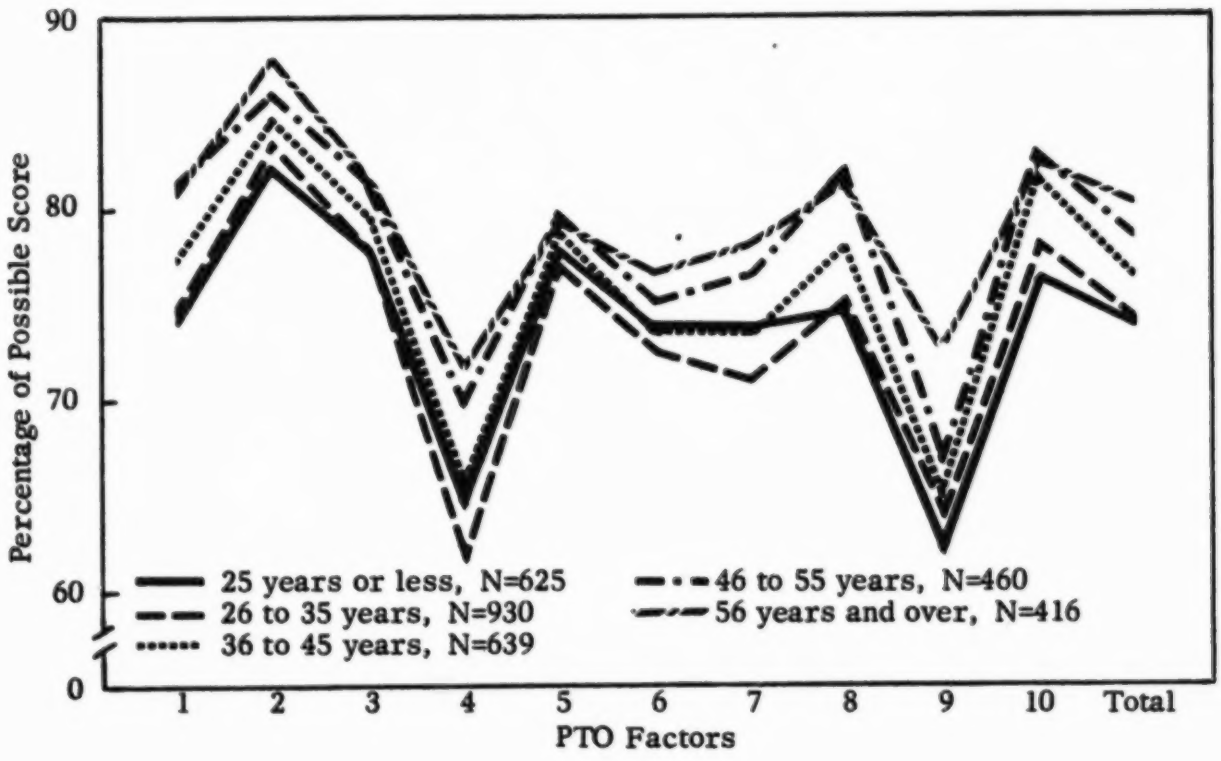
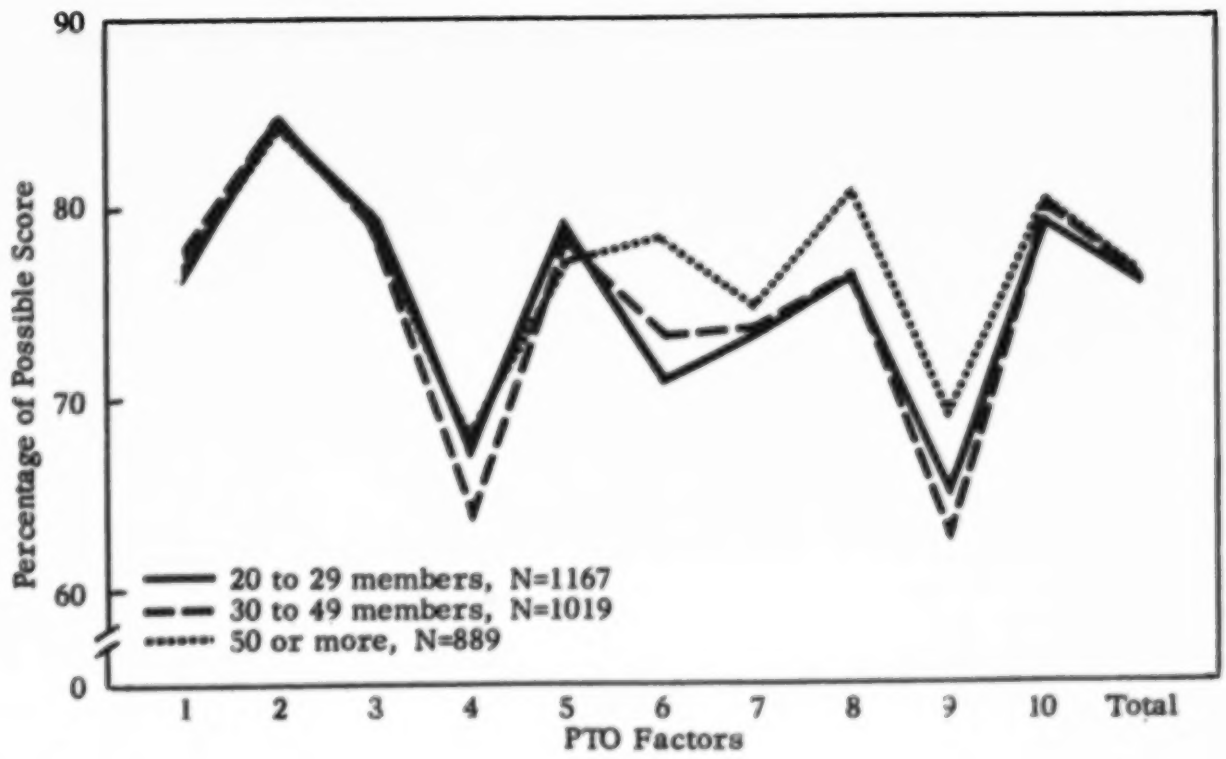


Chart 8. Comparison of Mean PTO Scores by Size of School Faculty.



shift in level of significance occurred in Factor 5 (Teacher Load) where mean differences became non-significant for experience in the present position.

For graphic comparisons for total years of teaching experience and number of years in present position, see Charts 9 and 10.

(7) Teacher Salary

As might be expected, when teachers were grouped according to seven salary levels, significant F-ratios at the .01 level were obtained for the total score and for all factors except one (Teacher Load). In general, it can be seen from Table 15 and Chart 11 that there was a high correlation between salary level and the level of morale. However, a group of 59 teachers in the lowest salary bracket (less than $5,000) did not conform to the general pattern. Mean morale scores for this group ranked from lowest on satisfaction with teaching to highest on rapport among teachers and teacher status.

(8) Major Teaching Area

Means for total morale scores did not differ significantly among the different subject area groups (Table 16). Significant differences occurred for five of the factors at the .01 level--teacher salary, teacher load, curriculum issues, teacher status, and school facilities and services. Differences were significant at the .05 level for teacher rapport with principal and rapport among teachers.

From Table 16 it can be seen that it is difficult to establish any distinct or consistent pattern of mean scores for the different major teaching areas. For those factors where differences are significant, the language teachers rank consistently high while social studies and music teachers rank consistently low. It might also be noted that vocational teachers ranked high in teacher rapport with principal, rapport among teachers, and community support of education and low with respect to teacher load, school facilities and services, and community pressures.

Charts 12a, 12b, and 12c present a graphical comparison of mean morale scores for vocational teachers with the mean scores for teachers in the other subject areas.

Table 15. Comparison of Teacher PTO Scores by Salary Levels

Salary	Number of Cases	Percentage of PTO Scores by Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 1. Teacher Rapport with Principal						
Less than $5000	59	15	58	27	64. 03	13. 21	
$5000-$5999	802	24	60	16	60. 15	13. 62	
$6000-$6999	651	27	55	18	60. 36	13. 77	
$7000-$7999	583	24	56	20	61. 46	13. 89	
$8000-$8999	509	21	52	27	62. 68	13. 63	
$9000-$9999	328	20	51	29	63. 26	13. 58	
$10000 or more	144	16	53	31	64. 44	13. 14	5. 04**
	Factor 2. Satisfaction with Teaching						
Less than $5000	59	20	63	17	64. 47	15. 88	
$5000-$5999	802	30	55	15	65. 68	12. 20	
$6000-$6999	651	22	58	20	67. 52	11. 38	
$7000-$7999	583	20	60	20	67. 89	11. 29	
$8000-$8999	509	16	56	28	69. 21	11. 16	
$9000-$9999	328	17	57	26	68. 50	12. 32	
$10000 or more	144	13	54	33	69. 47	12. 12	6. 78**
	Factor 3. Rapport among Teachers						
Less than $5000	59	15	51	34	46. 25	8. 18	
$5000-$5999	802	25	55	20	43. 89	7. 72	
$6000-$6999	651	25	55	20	43. 90	7. 72	
$7000-$7999	583	23	54	23	44. 60	7. 75	
$8000-$8999	509	20	54	26	45. 07	7. 16	
$9000-$9999	328	17	55	28	45. 16	7. 68	
$10000 or more	144	22	54	24	44. 82	7. 51	2. 95**
	Factor 4. Teacher Salary						
Less than $5000	59	17	64	19	18. 41	4. 29	
$5000-$5999	802	24	54	22	18. 12	5. 04	
$6000-$6999	651	29	52	19	17. 53	5. 25	
$7000-$7999	583	26	45	29	18. 48	5. 52	
$8000-$8999	509	23	47	30	19. 09	5. 33	
$9000-$9999	328	21	46	33	19. 03	5. 33	
$10000 or more	144	15	54	31	19. 60	4. 93	6. 95**
	Factor 5. Teacher Load						
Less than $5000	59	14	54	32	34. 90	7. 84	
$5000-$5999	802	23	54	24	34. 06	6. 73	
$6000-$6999	651	22	55	23	34. 36	6. 48	
$7000-$7999	583	24	50	26	34. 26	6. 76	
$8000-$8999	509	20	52	28	34. 95	6. 69	
$9000-$9999	328	21	51	28	34. 73	6. 83	
$10000 or more	144	21	52	27	34. 22	7. 09	1. 16

Table 15. (continued)

Salary	Number of Cases	Percentage of PTO Scores by Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 6. Curriculum Issues						
Less than $5000	59	18	46	36	15.46	3.73	
$5000-$5999	802	21	57	22	14.46	3.53	
$6000-$6999	651	22	57	21	14.46	3.55	
$7000-$7999	583	20	56	24	14.62	3.47	
$8000-$8999	509	15	64	21	14.96	3.16	
$9000-$9999	328	14	55	30	15.43	3.33	
$10000 or more	144	11	53	36	16.06	2.98	8.31**
	Factor 7. Teacher Status						
Less than $5000	59	22	49	29	24.76	5.47	
$5000-$5999	802	24	55	21	23.25	5.36	
$6000-$6999	651	25	55	20	23.19	5.22	
$7000-$7999	583	22	56	22	23.33	5.22	
$8000-$8999	509	20	48	32	24.24	5.41	
$9000-$9999	328	17	55	28	24.36	5.13	
$10000 or more	144	18	56	26	24.44	5.24	4.95**
	Factor 8. Community Support of Education						
Less than $5000	59	27	49	24	15.42	6.38	
$5000-$5999	802	36	48	16	14.80	9.66	
$6000-$6999	651	30	53	17	15.05	8.20	
$7000-$7999	583	22	53	25	15.59	6.17	
$8000-$8999	509	18	54	28	16.07	6.49	
$9000-$9999	328	20	49	31	16.35	8.00	
$10000 or more	144	16	31	33	17.09	8.87	3.38**
	Factor 9. School Facilities and Services						
Less than $5000	59	15	54	31	13.51	5.11	
$5000-$5999	802	28	54	18	12.40	4.27	
$6000-$6999	651	25	53	22	12.92	4.23	
$7000-$7999	583	22	53	25	13.26	4.18	
$8000-$8999	509	21	48	31	13.62	4.13	
$9000-$9999	328	17	53	30	13.70	4.35	
$10000 or more	144	13	58	29	13.63	4.18	6.74**
	Factor 10. Community Pressures						
Less than $5000	59	17	44	39	15.83	4.96	
$5000-$5999	802	29	51	20	15.43	3.90	
$6000-$6999	651	25	53	22	15.79	3.60	
$7000-$7999	583	22	52	26	16.12	3.52	
$8000-$8999	509	15	54	31	16.41	3.63	
$9000-$9999	328	13	58	29	16.34	3.88	
$10000 or more	144	20	46	34	16.18	4.03	4.92**

Table 15. (continued)

Salary	Number of Cases	Percentage of PTO Scores by Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	TOTAL						
Less than $5000	59	18	46	36	301. 34	89. 00	
$5000-$5999	802	27	55	18	296. 77	62. 67	
$6000-$6999	651	26	56	18	300. 56	59. 18	
$7000-$7999	583	23	55	22	305. 79	58. 61	
$8000-$8999	509	19	51	30	311. 61	61. 04	
$9000-$9999	328	15	53	30	310. 83	66. 30	
$10000 or more	144	15	51	34	312. 94	69. 89	4. 64**

** Significant at . 01 level

Table 16. Comparison of Teacher PTO Scores by Major Teaching Areas

Teaching Area	Number of Cases	Percentage of PTO Scores by Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 1. Teacher Rapport with Principal						
Language Arts	553	27	50	23	60. 39	14. 86	
Social Studies	406	23	59	18	61. 10	13. 51	
Language	163	23	58	19	61. 14	13. 44	
Mathematics	287	23	55	22	61. 69	12. 70	
P. E. and Health	247	22	54	24	61. 19	14. 54	
Science	269	19	62	19	62. 09	13. 35	
Business	284	26	58	16	59. 88	13. 61	
Practical Arts	211	22	56	22	62. 23	12. 54	
Music	123	25	57	18	61. 16	14. 11	
Other	309	20	51	29	63. 00	14. 24	
Vocational	223	6	90	4	63. 62	12. 13	1. 84*
	Factor 2. Satisfaction with Teaching						
Language Arts	553	24	55	21	64. 11	12. 28	
Social Studies	406	23	57	20	67. 60	11. 64	
Language	163	21	54	25	68. 14	11. 22	
Mathematics	287	21	61	18	67. 46	10. 58	
P. E. and Health	247	16	63	21	66. 92	14. 38	
Science	269	28	49	23	66. 85	11. 93	
Business	284	20	58	22	67. 67	11. 52	
Practical Arts	211	26	61	13	66. 92	9. 67	
Music	123	15	56	29	69. 38	10. 88	
Other	309	16	56	29	69. 37	13. 07	
Vocational	223	48	52	0	67. 54	11. 45	0. 78
	Factor 3. Rapport among Teachers						
Language Arts	553	26	50	24	43. 87	8. 12	
Social Studies	406	27	52	21	43. 70	8. 09	
Language	163	23	54	23	44. 76	7. 59	
Mathematics	287	20	60	20	44. 78	6. 42	
P. E. and Health	247	21	54	25	43. 59	8. 98	
Science	269	19	56	25	45. 16	7. 51	
Business	284	22	53	25	44. 91	7. 04	
Practical Arts	211	20	55	25	45. 55	6. 85	
Music	123	23	53	24	44. 05	8. 21	
Other	308	24	52	24	44. 61	7. 72	
Vocational	223	30	65	5	44. 94	6. 44	2. 01*
	Factor 4. Teacher Salary						
Language Arts	553	22	50	28	18. 84	5. 31	
Social Studies	406	31	48	21	17. 51	5. 37	
Language	163	22	45	33	18. 88	5. 49	
Mathematics	287	25	51	24	18. 28	5. 19	
P. E. and Health	247	25	52	23	17. 96	5. 17	
Science	269	23	54	23	18. 32	5. 17	
Business	284	23	52	25	18. 44	5. 10	
Practical Arts	211	23	46	31	18. 75	5. 46	
Music	123	30	46	24	17. 79	5. 37	
Other	309	21	49	30	18. 82	5. 28	
Vocational	223	1	63	36	18. 64	4. 93	2. 38**

Table 16. (continued)

Teaching Area	Number of Cases	Percentage of PTO Scores by Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 5. Teacher Load						
Language Arts	553	21	56	23	34. 25	6. 66	
Social Studies	406	22	52	26	34. 57	6. 72	
Language	163	14	47	29	36. 33	6. 03	
Mathematics	287	17	50	33	35. 62	6. 41	
P. E. and Health	247	21	50	29	34. 16	7. 51	
Science	269	20	52	28	35. 14	6. 28	
Business	284	22	53	25	34. 31	6. 82	
Practical Arts	211	29	55	16	33. 53	6. 28	
Music	123	31	50	19	32. 98	6. 85	
Other	309	21	51	28	34. 25	7. 30	
Vocational	223	7	71	22	32. 75	6. 26	5. 01**
	Factor 6. Curriculum Issues						
Language Arts	553	21	58	21	14. 47	3. 54	
Social Studies	406	20	57	23	14. 54	3. 53	
Language	163	17	59	24	14. 91	3. 53	
Mathematics	287	15	60	25	15. 08	3. 15	
P. E. and Health	247	14	55	31	15. 35	3. 30	
Science	269	19	61	20	14. 72	3. 23	
Business	284	13	59	28	15. 23	3. 32	
Practical Arts	211	21	53	26	14. 75	3. 60	
Music	123	22	60	18	14. 22	3. 56	
Other	309	24	54	22	14. 64	3. 58	
Vocational	223	1	62	37	14. 80	3. 43	2. 46**
	Factor 7. Teacher Status						
Language Arts	553	23	31	26	23. 72	5. 51	
Social Studies	406	27	53	20	22. 84	5. 56	
Language	163	19	52	29	24. 18	5. 44	
Mathematics	287	24	57	19	23. 33	4. 92	
P. E. and Health	247	20	57	23	24. 15	5. 30	
Science	269	27	54	19	22. 75	5. 51	
Business	284	18	57	25	24. 13	4. 93	
Practical Arts	211	23	55	22	23. 31	5. 32	
Music	123	23	49	28	23. 84	5. 48	
Other	309	19	52	29	24. 38	5. 28	
Vocational	223	14	76	10	23. 71	4. 60	3. 15**
	Factor 8. Community Support of Education						
Language Arts	553	31	49	20	15. 07	8. 75	
Social Studies	406	30	49	21	15. 24	7. 53	
Language	163	24	49	26	15. 22	6. 91	
Mathematics	287	25	49	26	15. 70	8. 24	
P. E. and Health	247	23	54	23	16. 88	11. 33	
Science	269	24	54	22	15. 50	6. 51	
Business	284	22	56	22	15. 66	7. 54	
Practical Arts	211	23	57	20	14. 81	4. 68	
Music	123	31	48	21	14. 50	5. 09	
Other	309	25	48	27	16. 27	9. 79	
Vocational	223	8	77	25	15. 71	8. 29	1. 59

Table 16. (continued)

Teaching Area	Number of Cases	Percentage of PTO Scores by Stanine Levels 1, 2, 3	4, 5, 6	7, 8, 9	Mean	S. D.	F-Ratio
	Factor 9. School Facilities and Services						
Language Arts	553	28	52	20	12. 73	4. 35	
Social Studies	406	24	53	23	12. 89	4. 42	
Language	163	20	49	31	13. 47	4. 26	
Mathematics	287	18	50	32	13. 93	4. 03	
P. E. and Health	247	27	48	25	12. 66	4. 88	
Science	269	24	53	23	13. 13	4. 09	
Business	284	21	52	27	13. 44	4. 23	
Practical Arts	211	18	60	22	13. 50	3. 73	
Music	123	25	54	21	13. 02	4. 34	
Other	309	23	52	25	12. 93	4. 50	
Vocational	223	2	71	27	12. 84	4. 03	2. 46**
	Factor 10. Community Pressures						
Language Arts	553	22	50	28	15. 96	3. 80	
Social Studies	406	24	49	27	15. 83	3. 98	
Language	163	18	48	34	16. 66	3. 24	
Mathematics	287	19	57	24	16. 20	3. 44	
P. E. and Health	247	23	56	21	15. 29	4. 53	
Science	269	21	53	26	16. 11	3. 56	
Business	284	23	52	25	15. 89	3. 77	
Practical Arts	211	24	53	23	16. 04	3. 28	
Music	123	22	55	23	15. 85	3. 69	
Other	309	21	51	28	15. 92	4. 02	
Vocational	223	37	52	10	15. 69	3. 53	1. 68
	TOTAL						
Language Arts	553	28	50	22	301. 12	63. 90	
Social Studies	406	25	54	21	301. 10	62. 15	
Language	163	18	56	26	311. 05	53. 90	
Mathematics	287	22	55	23	307. 66	56. 90	
P. E. and Health	247	22	62	26	296. 73	82. 29	
Science	269	23	54	23	305. 67	60. 16	
Business	284	22	54	24	304. 76	61. 07	
Practical Arts	211	22	54	24	307. 82	47. 34	
Music	123	24	55	21	302. 54	61. 04	
Other	309	19	53	28	306. 19	70. 34	
Vocational	223	13	76	11	305. 55	56. 60	1. 00

* Significant at . 05 level
** Significant at . 01 level

Chart 9. Comparison of Mean PTO Scores by Total Years of Teaching Experience.

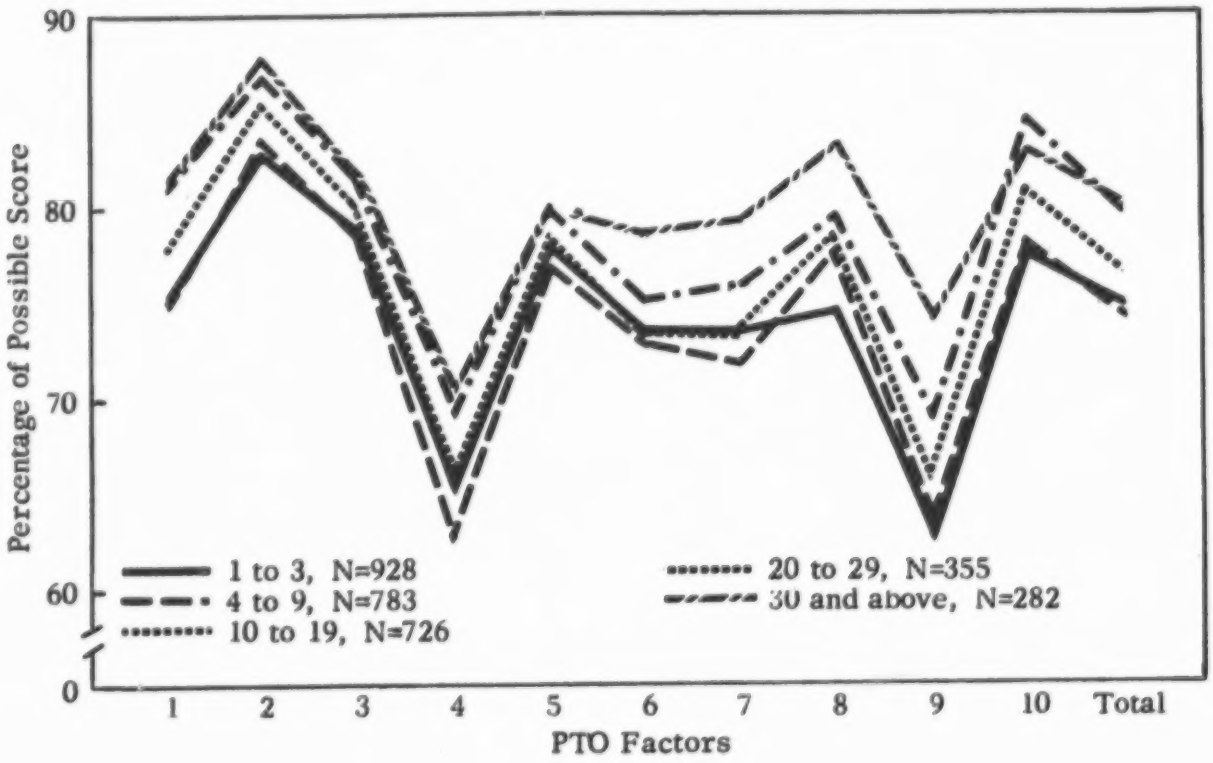


Chart 10. Comparison of Mean PTO Scores by Years of Experience in Present Position.

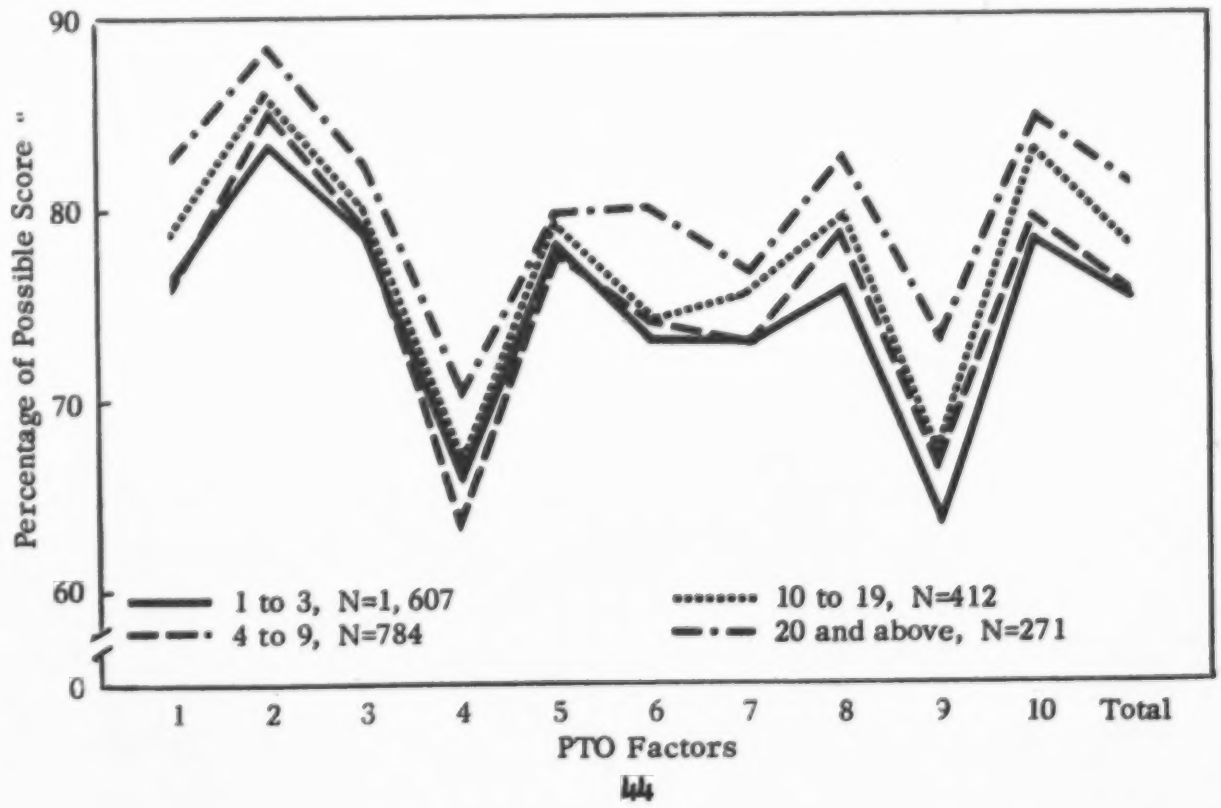


Chart 11. Comparison of Mean PTO Scores by Salary Levels.

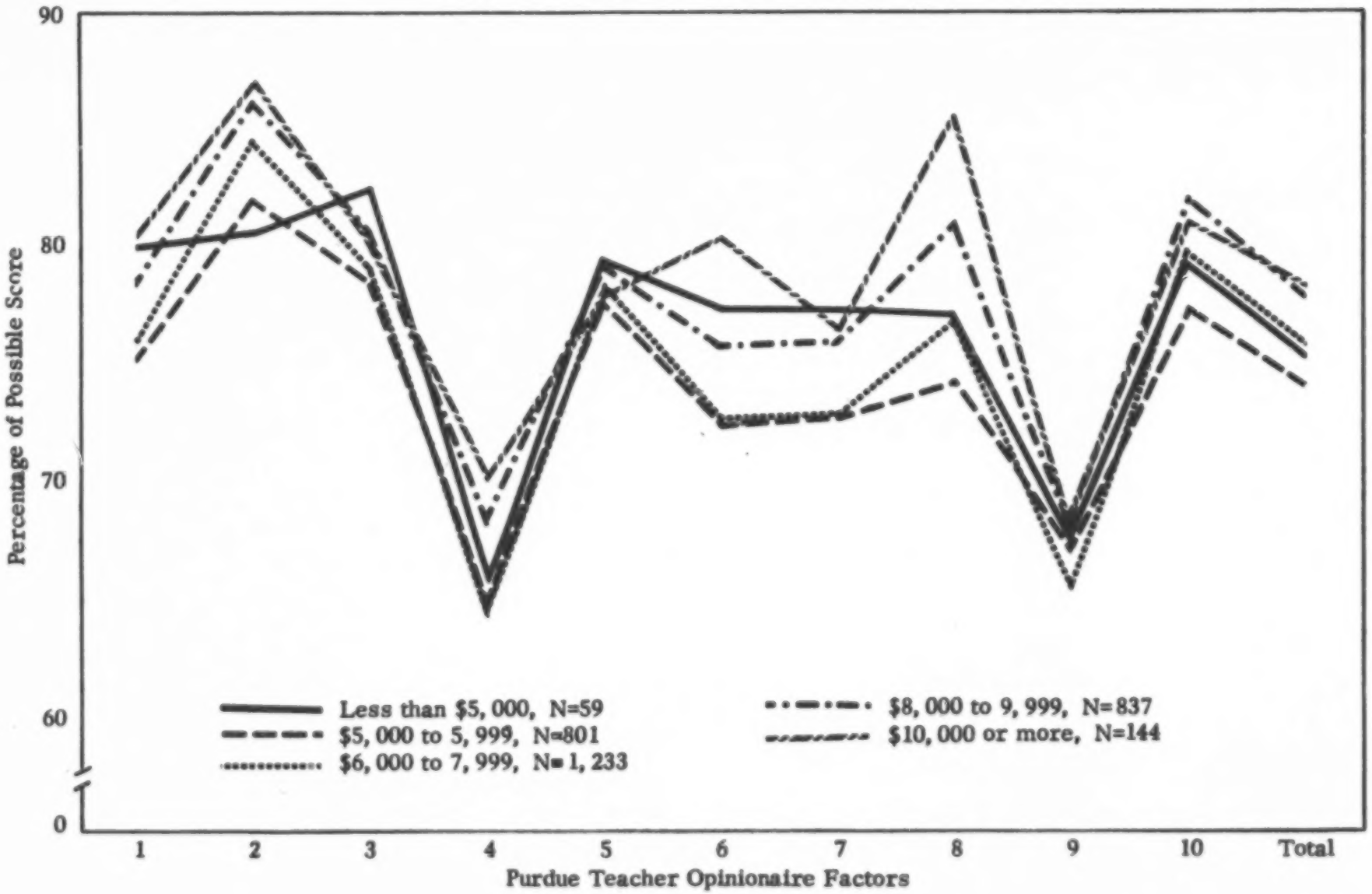


Chart 12a. Comparison of Mean PTO Scores by Major Teaching Areas.

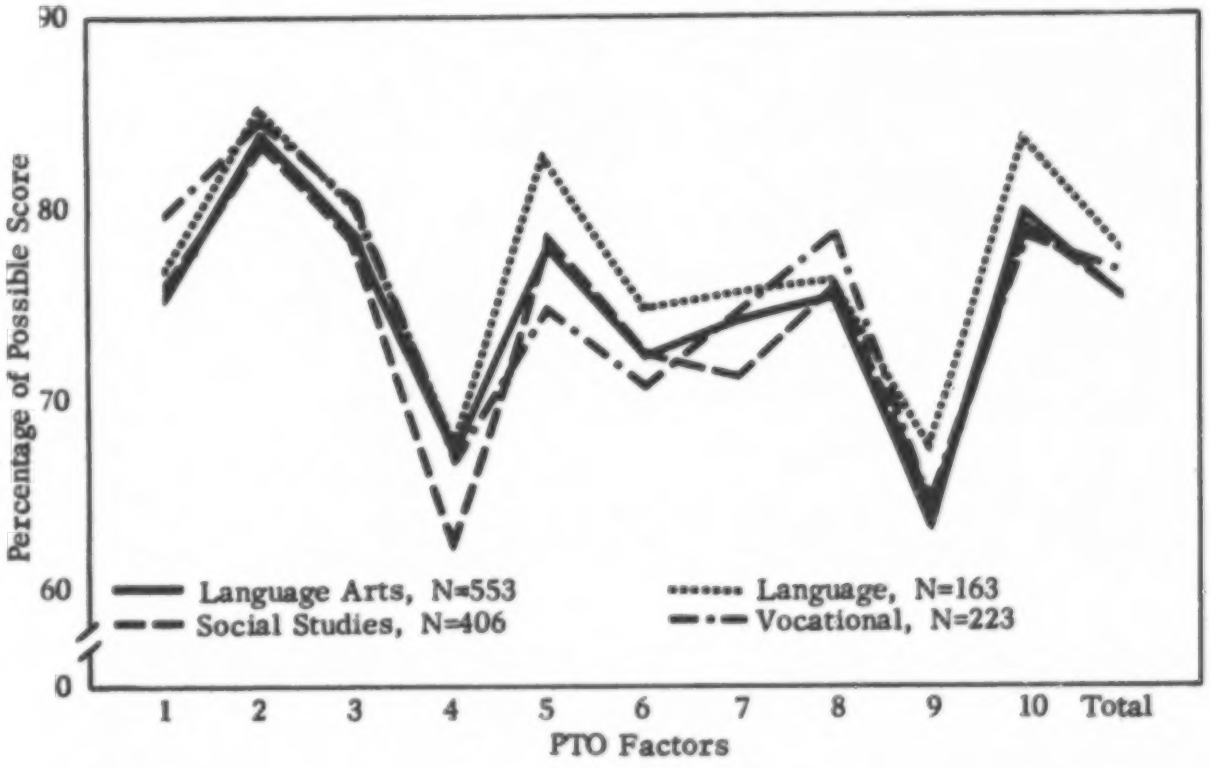


Chart 12b. Comparison of Mean PTO Scores by Major Teaching Areas.

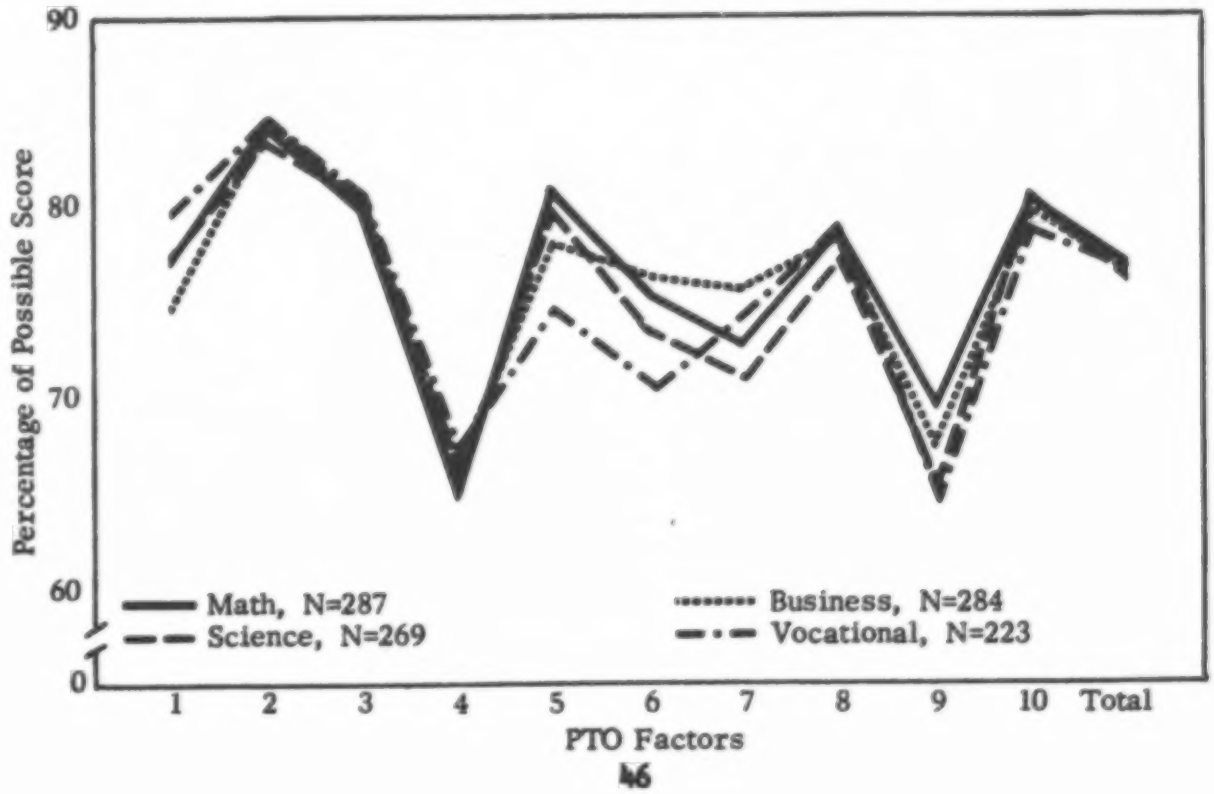


Chart 12c. Comparison of Mean PTO Scores by Major Teaching Areas

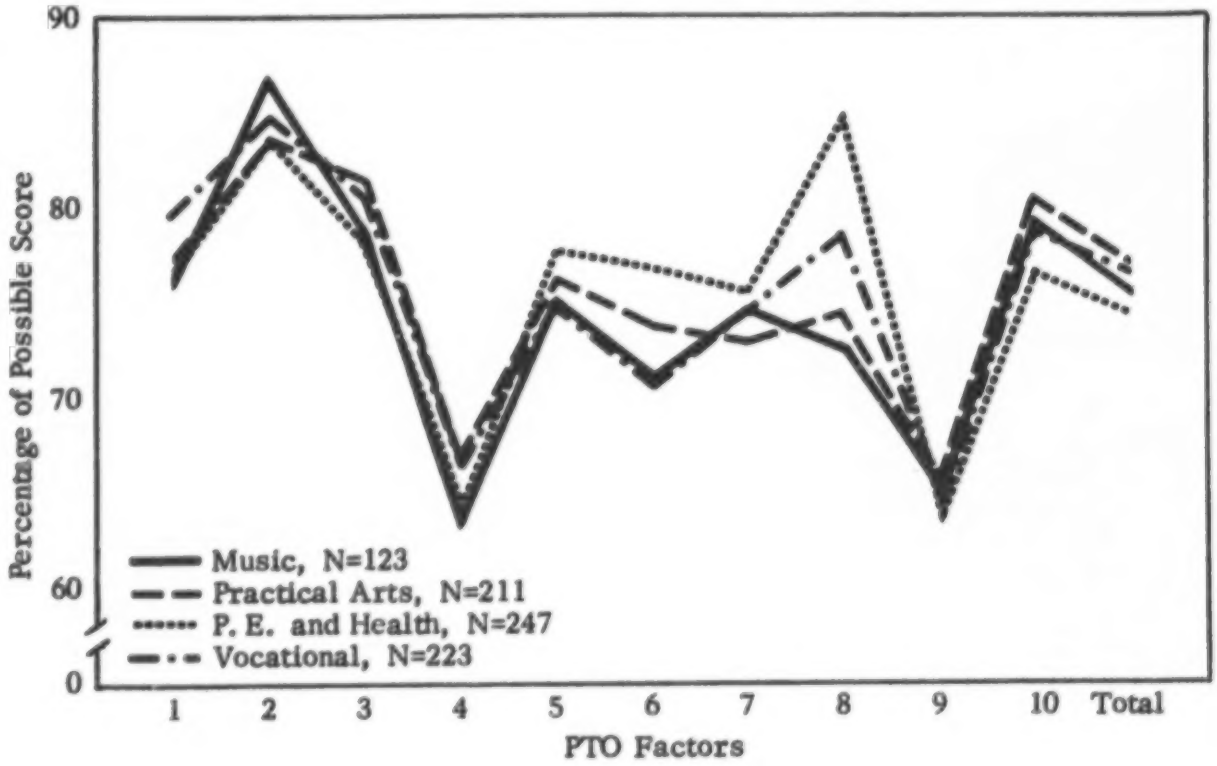


Chart 13. Comparison of Mean PTO Scores of Indiana Vocational Groups.

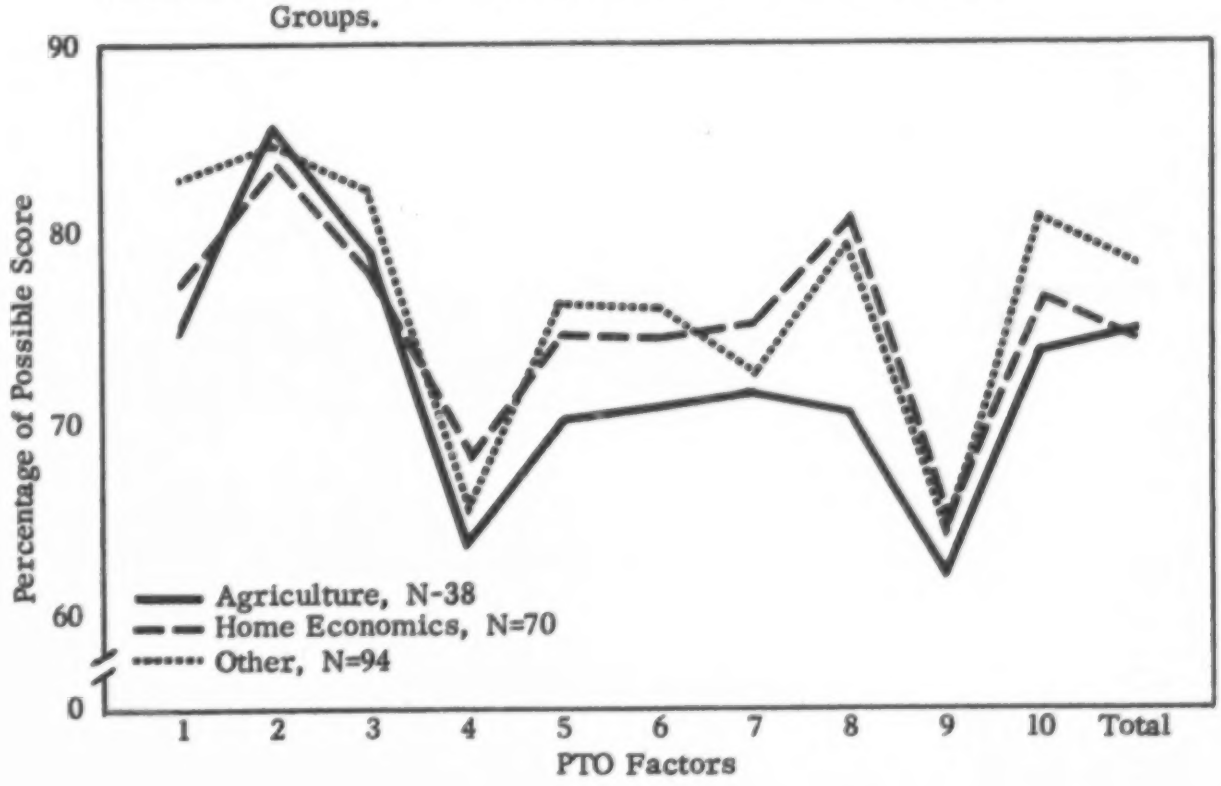


Table 17 presents in summary the significance of all the F-ratios resulting from the ANOV comparisons shown in Tables 8 to 18.

Table 17. Summary of Significant F-Ratios for PTO Factor and Total Score Comparisons by Selected Factors

	PTO Factor*										
	1	2	3	4	5	6	7	8	9	10	Total Score
State	NS	.05	NS	.01	NS	NS	NS	.05	.01	.01	NS
Sex	NS	.05	NS	.01	NS	NS	.01	NS	NS	.05	.05
Degree Held	.05	.01	NS	NS	.05	.01	NS	NS	.01	.01	.01
Age	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
Size of Faculty	NS	NS	NS	.01	.01	.01	NS	.05	.01	NS	NS
Experience (Total)	.01	.01	.01	.01	.05	.01	.01	.05	.01	.01	.01
Experience (Present Position)	.01	.01	.01	.01	NS	.01	.01	.05	.01	.01	.01
Salary	.01	.01	.05	.01	NS	.01	.01	.01	.01	.01	.01
Teaching Assignment	.05	NS	.05	.01	.01	.01	.01	NS	.01	NS	NS

* Factors

1. Teacher Rapport with Principal
2. Satisfaction with Teaching
3. Rapport among Teachers
4. Teacher Salary
5. Teacher Load
6. Curriculum Issues
7. Teacher Status
8. Community Support of Education
9. School Facilities and Services
10. Community Pressures

DISCUSSION

In setting up this study we made the basic assumption that feedback about problems and tensions that are identified by teachers in their school situations and feedback follow-up would stimulate group interaction and group problem-solving procedures and thus result in improved morale. This assumption was not supported by the results obtained. On the contrary, the findings consistently favored the group of teachers not receiving such feedback.

We are confident that the procedures used in collecting the data and providing the information were adequate. The profiles of teacher reactions to the Opinionaire items clearly identified problems existing in particular schools. The presentation of the profiles both to the principal and to the teaching staff by members of the research team provided ample opportunities for discussion and interpretation of the results.

However, we have some serious misgivings about the feedback follow-up. Because of the diverse nature of the problems identified in various schools, it did not seem feasible to provide the schools with highly structured and formalized follow-up activities. Instead, each school faculty was encouraged to make a careful assessment of its problems and to prepare a plan of action that might help in the solution of these problems. It was suggested that this proposed plan of action be filed with the research director. Selected materials and suggested references related to teacher morale were provided but consultative assistance was given only if requested by the principal.

It can readily be seen that the initiative for engaging in follow-up activities was left largely to the principal and the faculty. We had planned, however, to keep in close contact with the experimental schools so that encouragement and assistance could be given when necessary. A severe cut in the budget for the second year of the project made it necessary to limit further contacts to one visit -- the one during which the final administration of the Opinionaire took place.

Actually, about half of the principals submitted plans of action. On the other hand, with few exceptions, the principals attended the meeting designed to prepare them for the feedback presentation to their faculties. Some plans were quite comprehensive in their scope; others included rather specific activities focused on a few crucial issues or problems. Although it would have been highly desirable to determine the extent to which

suggested plans of action were implemented, the resources were simply not available to carry out such an evaluation.

In a few of the experimental schools there was a marked improvement in morale. Reports submitted by two of these schools are given below:

"In reply to your letter of December 29 requesting what had been done since the 'feedback' to eliminate teacher morale problems, the following actions have been taken:

1. Special meetings of the teachers to explain how certain policies, regulations, and procedures are determined (e.g. how teachers salary schedules are made).
2. Complete review of procedures for our requisitioning supplies and equipment.
3. Teachers handbook revised with an attempt to clarify as many questions as teachers indicated some lack or misunderstanding on which the teachers had.
4. A complete study of our teachers' reaction on the questionnaire with a thorough discussion on why they reacted as they did.
5. Additional secretarial help.
6. Last year we had an additional high school transfer to School X along with a a portion of the faculty of that school. We also had a number of additional new teachers which probably had some effect on their reaction to the questions. The present school year, 1966-67, only one new faculty member was added to the staff.
7. Some work is being done on the curriculum and we have the service of the curriculum coordinator."

"This year, during our local teacher in-service, we spent most of the three days going over the 'feedback.' Each teacher was given a copy of the report and we proceeded to work on the areas that needed the most attention at that time. All faculty members were very frank in their statements and many times they were surprised at the low ratings in certain areas. Many faculty members felt that the time was well spent and that it was the best in-service we had had.

So far this year the teacher morale has been quite high. This is the time of the year, however, when teachers are either rehired or fired, committees meet with school boards to discuss salaries, and budgets have to be passed by the voters. So, I imagine that by the time the final opinionaire is given March 3, our teachers will be in a state of confusion. I do feel, however, that the final opinionaire will show a rise in areas not associated with money matters.

Changes in the past twelve months which affected the results are:

(1) Personnel changes.
(2) Preparation period for most teachers (last year was the first in six years that teachers had no preparation period).
(3) Additional equipment purchased.
(4) Budget passed for the first time."

It should be pointed out that other plans were submitted which on the surface, at least, looked just as good to us as those which have been cited, but did not result in an improvement in morale.

In spite of the results obtained in the study, we still hold to the hypothesis that persistent cooperative efforts made by a principal and his faculty to alleviate tensions and to solve problems that have been identified will result in improved morale. Apparently, the project was successful in making teachers aware of some of the problems existing in their school environment and in arousing considerable interest in doing something to resolve these difficulties. What was lacking was follow-through and tangible evidence that progress was being made. It isn't enough to get a group stirred up about existing conditions; there must be sustained and common effort to bring about needed change and improvement. Under the circumstances, most of the faculties were not sufficiently motivated or just could not devote the time and energy needed to really bring about change. With many competing activities and pressures, it was too much to expect that teachers, without adequate stimulation and direction, would get sufficiently involved to achieve significant results. More must be done than merely "scratching the surface."

A closer analysis of what happened in those experimental schools where significant gains in morale were made indicated to us that there was a real commitment to the purposes of the project. The principals worked actively with their faculties in developing an understanding of difficulties and then followed through with meaningful activities designed to overcome these difficulties.

It must also be kept in mind that the time factor is crucial when attempting to effect change in a group situation. Our results clearly indicate that when you are trying to change something as basic and complex as morale, not only must there be vigorous and enlightened effort, but such effort must be sustained for a sufficient period of time to allow the group processes to function and to produce tangible results. In many of the problem areas, the changes needed involved the superintendent, the school board, and the community. Such involvement, obviously, is a long-term enterprise.

Our findings concerning the relationships of personal characteristics with morale confirmed the results of earlier studies. However, this study introduces some significant new dimensions. It was possible to make comparisons not only for the total score, as was the case previously, but relationships were studied for each of the PTO factors. Thus it was possible to make a much more meaningful interpretation of the relationship between a particular characteristic and the level of morale.

A good illustration of the above can be seen from the results obtained for the relationship between sex and morale. In various other studies it was found that women have significantly higher morale than men. However, this study definitely established that the difference can be attributed almost entirely to two of the components affecting morale--salary and status.

SUMMARY AND CONCLUSIONS

This experimental study was primarily concerned with changing teacher morale. Given a certain level of teacher morale in a particular school situation, can the morale be improved by definite and deliberate procedures? More specifically, can feedback to the teachers and principal about problems and tensions existing in their school situation be used to change morale? Is such feedback effective in stimulating individual and group efforts to alleviate tensions and overcome existing difficulties, thus bringing about an improvement in the level of morale?

Other purposes of the project included making morale comparisons between vocational and non-vocational teachers and determining whether a relationship exists between teacher morale and certain selected factors.

The major questions to be answered in the study were the following:

1. Does feedback of teacher identified problems make a significant difference in changing teacher morale in particular schools situations for (a) teachers generally, (b) vocational teachers, and (c) non-vocational teachers?
2. Do vocational teachers differ significantly from non-vocational teachers in the general level of morale and in terms of specific morale factors?
3. Is there a relationship between teacher morale and such variables as age, sex, teaching experience, level of education, salary, and major teaching assignment?

The study population consisted of the faculties of 59 Indiana and 16 Oregon high schools. Altogether there were 3, 070 teachers--223 vocational and 2, 847 non-vocational. A Pretest-Posttest Experimental and Control Group Design was used and the Purdue Teacher Opinionaire was administered for both pretests and posttests. Personal teacher data used in studying the relationships between such factors as age, sex, and

degree held were secured from the respective State Department of Education.

Feedback based upon the responses of the teachers to the PTO at the first administration was made to each experimental school following the second pretest. These schools were encouraged to engage in follow-up activities that would involve the entire faculty.

The effects of feedback and feedback follow-up were made by comparing treatment means when adjusted on the basis of pretest scores. These analyses revealed that the adjusted mean scores for the experimental and control groups (all teachers) were significantly different for the total PTO scores and for six of the ten factor scores. Contrary to our expectations, the differences favored the control rather than the experimental group. Differences between experimental and control groups for non-vocational teachers followed a pattern that was identical with that of the total group. For the vocational teachers, however, statistically significant differences were obtained for only two of the ten factors and for the total score.

Data obtained from the first administration of the PTO were used to study the relationship of selected factors to teacher morale. Comparisons of Indiana and Oregon teachers' scores revealed that there was little difference in mean total morale scores. Significant differences occurred, however, for five of the ten factors. In four instances responses were more favorable for Oregon teachers and once for Indiana teachers.

For four of the ten factors and for the total, the morale scores of the women were significantly higher than the morale scores for men. Differences were highly significant for salary and status factors.

Marked differences were observed in the mean morale scores between teachers holding the master's degree and those holding the bachelor's degree. Significant differences were obtained for seven of the ten factors and for the total score.

Age groups were found to differ significantly at the .01 level for each factor and for total score. For the majority of the teachers, there was a gradual upward progression in the level of morale with increasing age.

When teachers were classified according to size of faculty, the total mean scores for the three groups were almost identical. However, significant differences were found to exist for five of the ten factors. The observed differences did not consistently favor any one group.

The results obtained indicated that teacher morale was significantly related to total years of teaching experience. Differences among the five experience groups were significant at either the .01 or .05 level for all factors and for total score. The pattern of differences was very similar to that when comparisons were made on the basis of teaching experience in present position.

When teachers were grouped according to seven salary levels, significant differences at the .01 level were obtained for total score and for all factors except one (Teacher Load). In general, there was a high correlation between salary level and the level of morale.

Means for total morale scores did not differ significantly among different subject area groups of teachers. Significant differences, however, did occur for five of the ten factors at the .01 level, and for two factors at the .05 level. It is difficult to establish any distinct or consistent pattern of mean scores for different major teaching areas.

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APPENDIX A

THE PURDUE TEACHER OPINIONAIRE

THE PURDUE TEACHER OPINIONAIRE

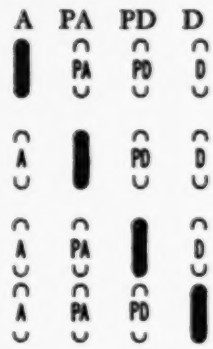
Prepared by Ralph R. Bentley and Averno M. Rempel

This instrument is designed to provide you the opportunity to express your opinions about your work as a teacher and various school problems in your particular school situation. There are no right or wrong responses, so do not hesitate to mark the statements frankly.

A separate answer sheet is furnished for your responses. Fill in the information requested on the answer sheet. You will notice that there is no place for your name. Please **do not** record your name. All responses will be strictly confidential and results will be reported by groups only. **DO NOT OMIT ANY ITEMS.**

DIRECTIONS FOR RECORDING RESPONSES ON ANSWER SHEET

Read each statement carefully. Then indicate whether you **agree**, **probably agree**, **probably disagree**, or **disagree** with each statement. Mark your answers on the separate answer sheet in the following manner:


A
PA
PD
D
If you agree with the statement, blacken the space
If you are somewhat uncertain, but probably agree with the statement, blacken the space
If you are somewhat uncertain, but probably disagree with the statement, blacken the space
If you disagree with the statement, blacken the space

All marks should be heavy and completely fill the answer space. If you change a response, erase the first mark completely. Make no stray marks on the answer sheet. Please do not mark this booklet.

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1. Details, "red tape," and required reports absorb too much of my time ..... A PA PD D

2. The work of individual faculty members is appreciated and commended by our principal ..... A PA PD D

3. Teachers feel free to criticize administrative policy at faculty meetings called by our principal ..... A PA PD D

4. The faculty feels that their suggestions pertaining to salaries are adequately transmitted by the administration to the board of education ..... A PA PD D

5. Our principal shows favoritism in his relations with the teachers in our school ..... A PA PD D

6. Teachers in this school are expected to do an unreasonable amount of record-keeping and clerical work ..... A PA PD D

7. My principal makes a real effort to maintain close contact with the faculty ..... A PA PD D

8. Community demands upon the teacher's time are unreasonable ..... A PA PD D

9. I am satisfied with the policies under which pay raises are granted ..... A PA PD D

10. My teaching load is greater than that of most of the other teachers in our school ..... A PA PD D

11. The extra-curricular load of the teachers in our school is unreasonable ..... A PA PD D

12. Our principal's leadership in faculty meetings challenges and stimulates our professional growth ..... A PA PD D

13. My teaching position gives me the social status in the community that I desire ..... A PA PD D

14. The number of hours a teacher must work is unreasonable ..... A PA PD D

15. Teaching enables me to enjoy many of the material and cultural things I like ..... A PA PD D

16. My school provides me with adequate classroom supplies and equipment ..... A PA PD D

17. Our school has a well-balanced curriculum ..... A PA PD D

18. There is a great deal of griping, arguing, taking sides, and feuding among our teachers ..... A PA PD D

19. Teaching gives me a great deal of personal satisfaction ..... A PA PD D

20. The curriculum of our school makes reasonable provision for student individual differences ..... A PA PD D

21. The procedures for obtaining materials and services are well defined and efficient ..... A PA PD D

22. Generally, teachers in our school do not take advantage of one another ..... A PA PD D

23. The teachers in our school cooperate with each other to achieve common, personal, and professional objectives ..... A PA PD D

24. Teaching enables me to make my greatest contribution to society ..... A PA PD D

25. The curriculum of our school is in need of major revisions ..... A PA PD D

26. I love to teach ..... A PA PD D

27. If I could plan my career again, I would choose teaching ..... A PA PD D

28. Experienced faculty members accept new and younger members as colleagues ..... A PA PD D

29. I would recommend teaching as an occupation to students of high scholastic ability ..... A PA PD D

30. If I could earn as much money in another occupation, I would stop teaching ..... A PA PD D

31. The school schedule places my classes at a disadvantage ..... A PA PD D

32. Within the limits of financial resources, the school tries to follow a generous policy regarding fringe benefits, professional travel, professional study, etc. ..... A PA PD D

33. My principal makes my work easier and more pleasant ..... A PA PD D

34. Keeping up professionally is too much of a burden ..... A PA PD D

35. Our community makes its teachers feel as though they are a real part of the community ..... A PA PD D

36. Salary policies are administered with fairness and justice ..... A PA PD D

37. Teaching affords me the security I want in an occupation ..... A PA PD D

38. My school principal understands and recognizes good teaching procedures ..... A PA PD D

39. Teachers clearly understand the policies governing salary increases ..... A PA PD D

40. My classes are used as a "dumping ground" for problem students ..... A PA PD D

41. The lines and methods of communication between teachers and the principal in our school are well developed and maintained ..... A PA PD D

42. My teaching load in this school is unreasonable ..... A PA PD D

43. My principal shows a real interest in my department ..... A PA PD D

44. Our principal promotes a sense of belonging among the teachers in our school ..... A PA PD D

45. My heavy teaching load unduly restricts my nonprofessional activities ..... A PA PD D

46. I find my contacts with students, for the most part, highly satisfying and rewarding ..... A PA PD D

47. I feel that I am an important part of this school system ..... A PA PD D

48. The competency of the teachers in our school compares favorably with that of teachers in other schools with which I am familiar ..... A PA PD D

49. My school provides the teachers with adequate audio-visual aids and projection equipment ..... A PA PD D

50. I feel successful and competent in my present position ..... A PA PD D

51. I enjoy working with student organizations, clubs, and societies ..... A PA PD D

52. Our teaching staff is congenial to work with ..... A PA PD D

53. My teaching associates are well prepared for their jobs ..... A PA PD D

54. Our school faculty has a tendency to form into cliques ..... A PA PD D

55. The teachers in our school work well together ..... A PA PD D

56. I am at a disadvantage professionally because other teachers are better prepared to teach than I am ..... A PA PD D

57. Our school provides adequate clerical services for the teachers ..... A PA PD D

58. As far as I know, the other teachers think I am a good teacher ..... A PA PD D

59. Library facilities and resources are adequate for the grade or subject area which I teach ..... A PA PD D

60. The "stress and strain" resulting from teaching makes teaching undesirable for me ..... A PA PD D

61. My principal is concerned with the problems of the faculty and handles these problems sympathetically ..... A PA PD D

62. I do not hesitate to discuss any school problem with my principal ..... A PA PD D

63. Teaching gives me the prestige I desire ..... A PA PD D

64. My teaching job enables me to provide a satisfactory standard of living for my family ..... A PA PD D

65. The salary schedule in our school adequately recognizes teacher competency ..... A PA PD D

66. Most of the people in this community understand and appreciate good education ..... A PA PD D

67. In my judgment, this community is a good place to raise a family ..... A PA PD D

68. This community respects its teachers and treats them like professional persons ..... A PA PD D

69. My principal acts as though he is interested in me and my problems ..... A PA PD D

70. My school principal supervises rather than "snoopervises" the teachers in our school ..... A PA PD D

71. It is difficult for teachers to gain acceptance by the people in this community ..... A PA PD D

72. Teachers' meetings as now conducted by our principal waste the time and energy of the staff ..... A PA PD D

73. My principal has a reasonable understanding of the problems connected with my teaching assignment ..... A PA PD D

74. I feel that my work is judged fairly by my principal ..... A PA PD D

75. Salaries paid in this school system compare favorably with salaries in other systems with which I am familiar ..... A PA PD D

76. Most of the actions of students irritate me ..... A PA PD D

77. The cooperativeness of teachers in our school helps make my work more enjoyable ..... A PA PD D

78. My students regard me with respect and seem to have confidence in my professional ability ..... A PA PD D

79. The purposes and objectives of the school cannot be achieved by the present curriculum ..... A PA PD D

80. The teachers in our school have a desirable influence on the values and attitudes of their students ..... A PA PD D

81. This community expects its teachers to meet unreasonable personal standards ..... A PA PD D

82. My students appreciate the help I give them with their school work ..... A PA PD D

83. To me there is no more challenging work than teaching ..... A PA PD D

84. Other teachers in our school are appreciative of my work ..... A PA PD D

85. As a teacher in this community, my nonprofessional activities outside of school are unduly restricted ..... A PA PD D

86. As a teacher, I think I am as competent as most other teachers ..... A PA PD D

87. The teachers with whom I work have high professional ethics ..... A PA PD D

88. Our school curriculum does a good job of preparing students to become enlightened and competent citizens ..... A PA PD D

89. I really enjoy working with my students ..... A PA PD D

90. The teachers in our school show a great deal of initiative and creativity in their teaching assignments ..... A PA PD D

91. Teachers in our community feel free to discuss controversial issues in their classes ..... A PA PD D

92. My principal tries to make me feel comfortable when he visits my classes ..... A PA PD D

93. My principal makes effective use of the individual teacher's capacity and talent ..... A PA PD D

94. The people in this community, generally, have a sincere and wholehearted interest in the school system ..... A PA PD D

95. Teachers feel free to go to the principal about problems of personal and group welfare ..... A PA PD D

96. This community supports ethical procedures regarding the appointment and reappointment of members of the teaching staff ..... A PA PD D

97. This community is willing to support a good program of education ..... A PA PD D

98. Our community expects the teachers to participate in too many social activities ..... A PA PD D

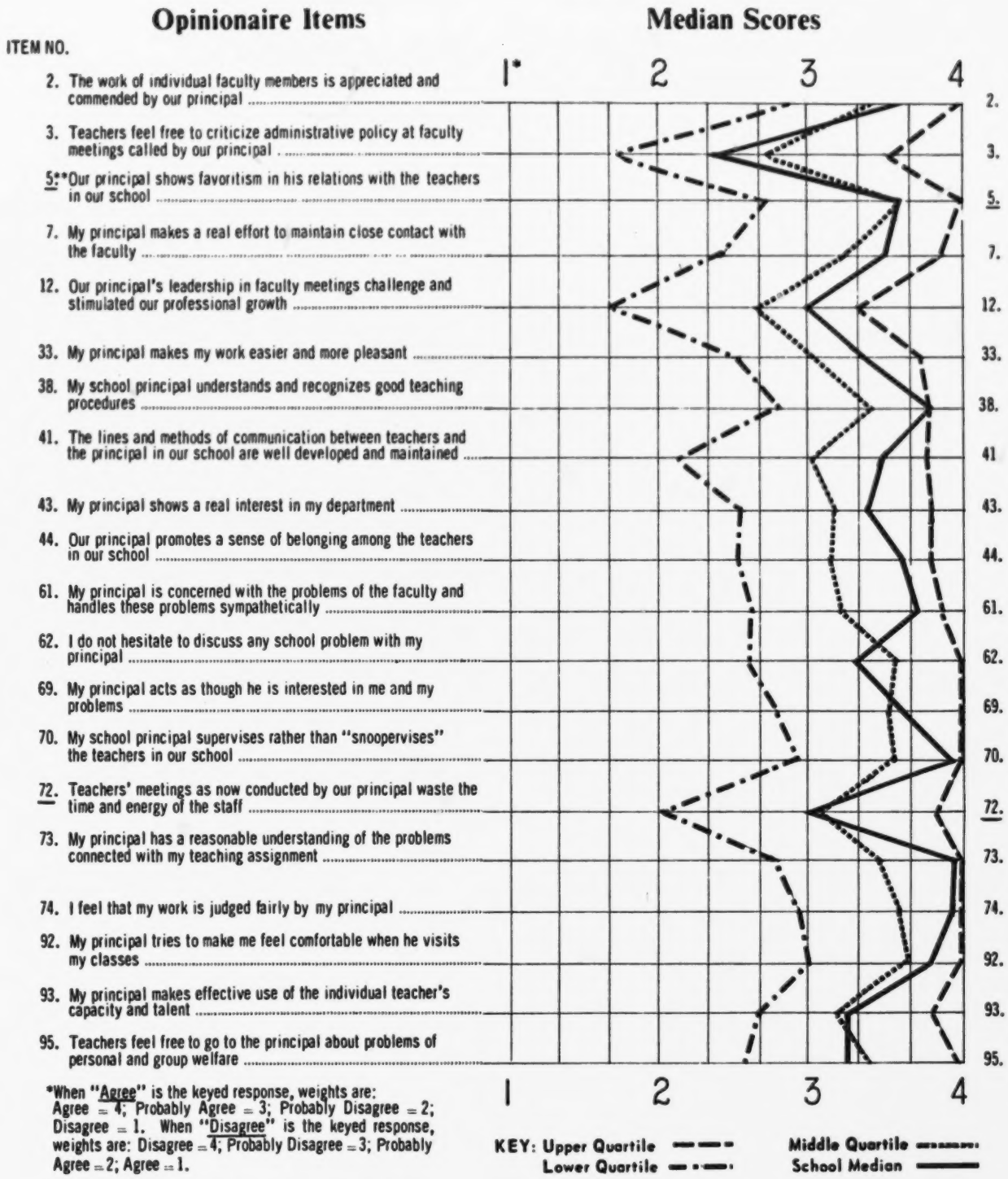
99. Community pressures prevent me from doing my best as a teacher ..... A PA PD D

100. I am well satisfied with my present teaching position ..... A PA PD D

APPENDIX B

SAMPLE OF FEEDBACK PROFILES

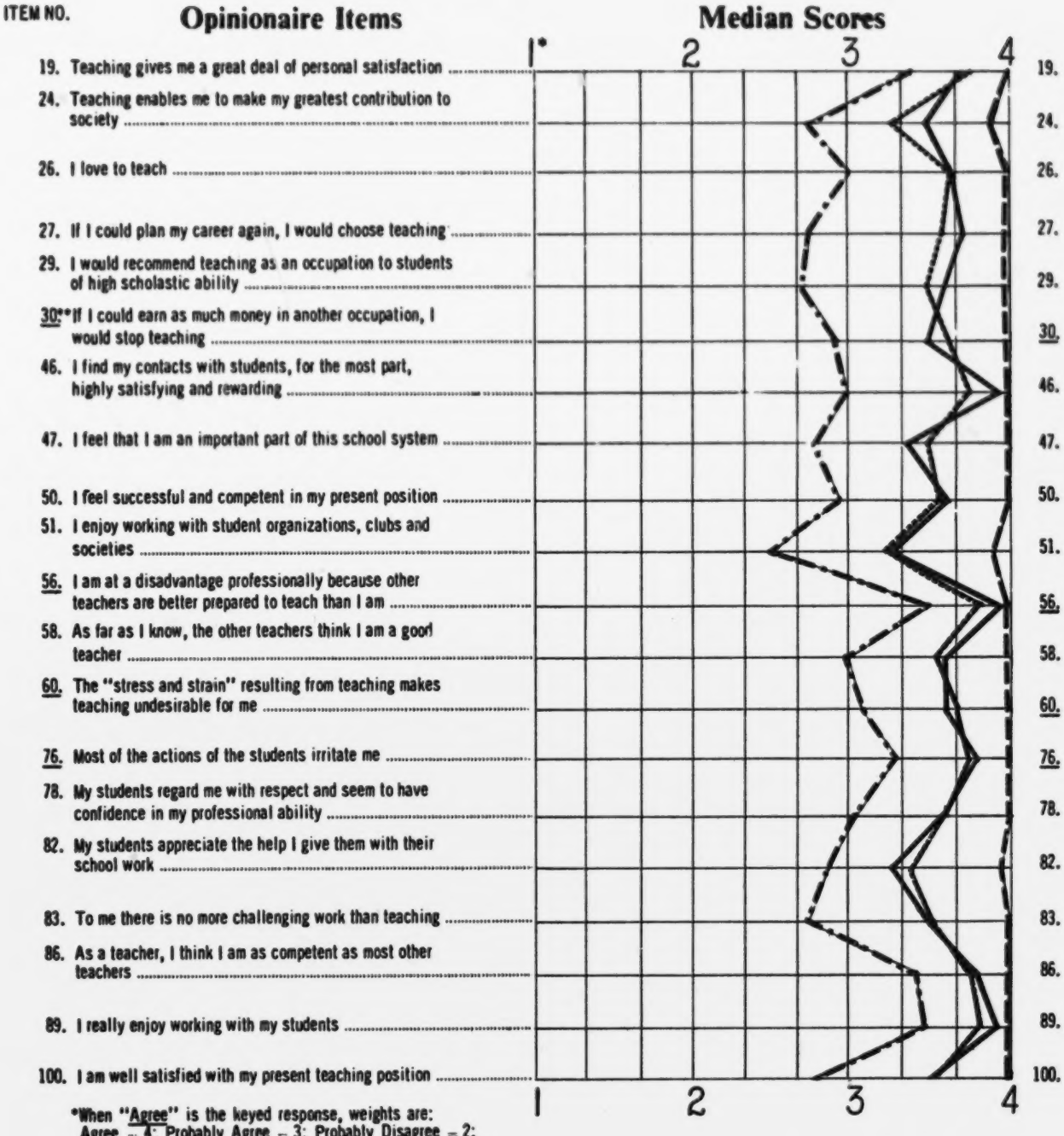
TEACHER RAPPORT WITH PRINCIPAL


Opinionaire Items
Median Scores
ITEM NO.
2. The work of individual faculty members is appreciated and commended by our principal
3. Teachers feel free to criticize administrative policy at faculty meetings called by our principal
5.** Our principal shows favoritism in his relations with the teachers in our school
7. My principal makes a real effort to maintain close contact with the faculty
12. Our principal's leadership in faculty meetings challenge and stimulated our professional growth
33. My principal makes my work easier and more pleasant
38. My school principal understands and recognizes good teaching procedures
41. The lines and methods of communication between teachers and the principal in our school are well developed and maintained
43. My principal shows a real interest in my department
44. Our principal promotes a sense of belonging among the teachers in our school
61. My principal is concerned with the problems of the faculty and handles these problems sympathetically
62. I do not hesitate to discuss any school problem with my principal
69. My principal acts as though he is interested in me and my problems
70. My school principal supervises rather than "snoopervises" the teachers in our school
72. Teachers' meetings as now conducted by our principal waste the time and energy of the staff
73. My principal has a reasonable understanding of the problems connected with my teaching assignment
74. I feel that my work is judged fairly by my principal
92. My principal tries to make me feel comfortable when he visits my classes
93. My principal makes effective use of the individual teacher's capacity and talent
95. Teachers feel free to go to the principal about problems of personal and group welfare
1* 2 3 4
1 2 3 4
KEY: Upper Quartile
Middle Quartile
Lower Quartile
School Median

*When "Agree" is the keyed response, weights are: Agree = 4; Probably Agree = 3; Probably Disagree = 2; Disagree = 1. When "Disagree" is the keyed response, weights are: Disagree = 4; Probably Disagree = 3; Probably Agree = 2; Agree = 1.

**Underlined numbers indicate items keyed "Disagree"

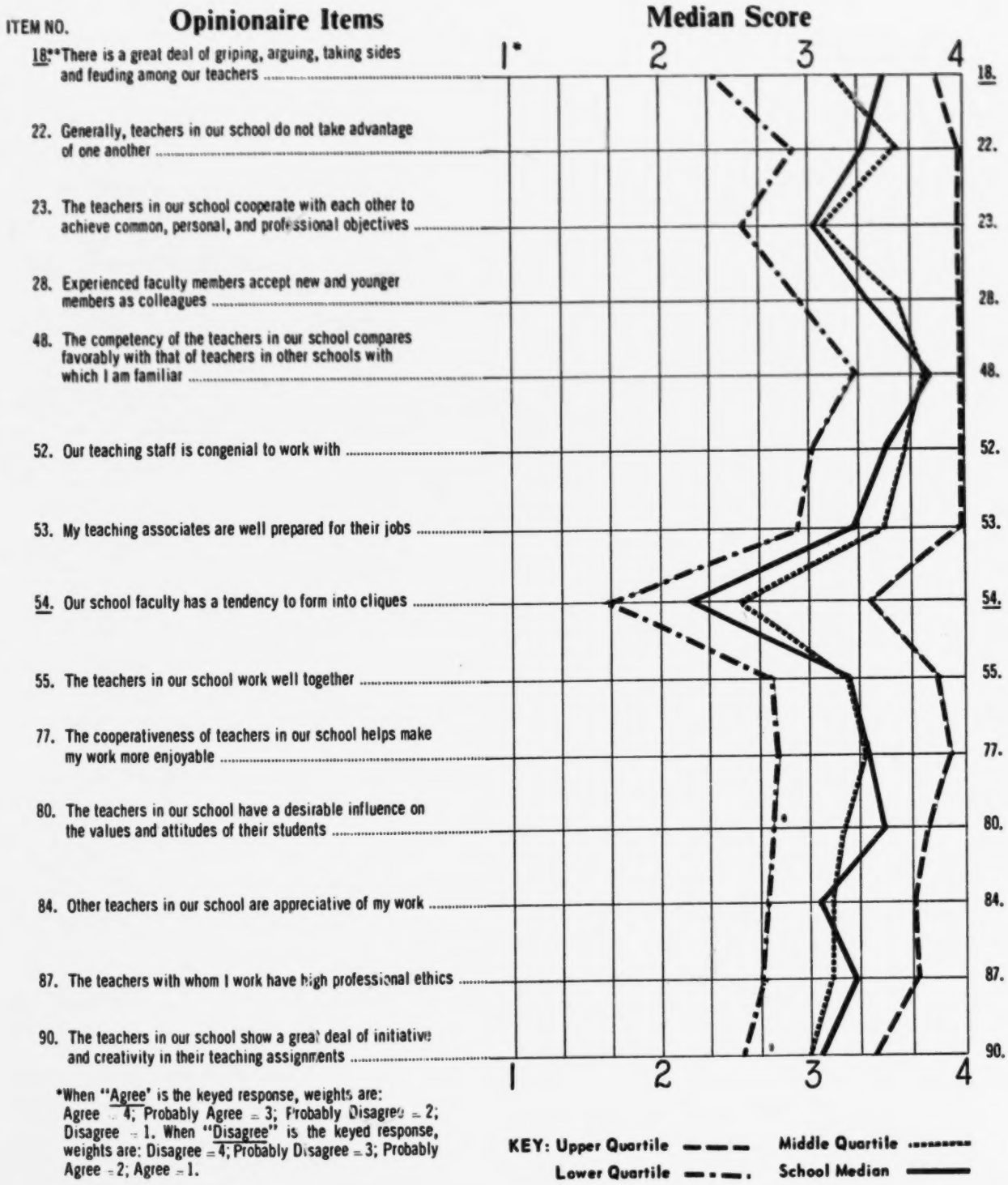
SATISFACTION WITH TEACHING


ITEM NO.
Opinionaire Items
Median Scores
1*
2
3
4
19. Teaching gives me a great deal of personal satisfaction
24. Teaching enables me to make my greatest contribution to society
26. I love to teach
27. If I could plan my career again, I would choose teaching
29. I would recommend teaching as an occupation to students of high scholastic ability
30** If I could earn as much money in another occupation, I would stop teaching
46. I find my contacts with students, for the most part, highly satisfying and rewarding
47. I feel that I am an important part of this school system
50. I feel successful and competent in my present position
51. I enjoy working with student organizations, clubs and societies
56. I am at a disadvantage professionally because other teachers are better prepared to teach than I am
58. As far as I know, the other teachers think I am a good teacher
60. The "stress and strain" resulting from teaching makes teaching undesirable for me
76. Most of the actions of the students irritate me
78. My students regard me with respect and seem to have confidence in my professional ability
82. My students appreciate the help I give them with their school work
83. To me there is no more challenging work than teaching
86. As a teacher, I think I am as competent as most other teachers
89. I really enjoy working with my students
100. I am well satisfied with my present teaching position
1
2
3
4
KEY: Upper Quartile
Middle Quartile
Lower Quartile
School Median

*When "Agree" is the keyed response, weights are: Agree = 4; Probably Agree = 3; Probably Disagree = 2; Disagree = 1. When "Disagree" is the keyed response, weights are: Disagree = 4; Probably Disagree = 3; Probably Agree = 2; Agree = 1.

**Underlined numbers indicate items keyed "Disagree"

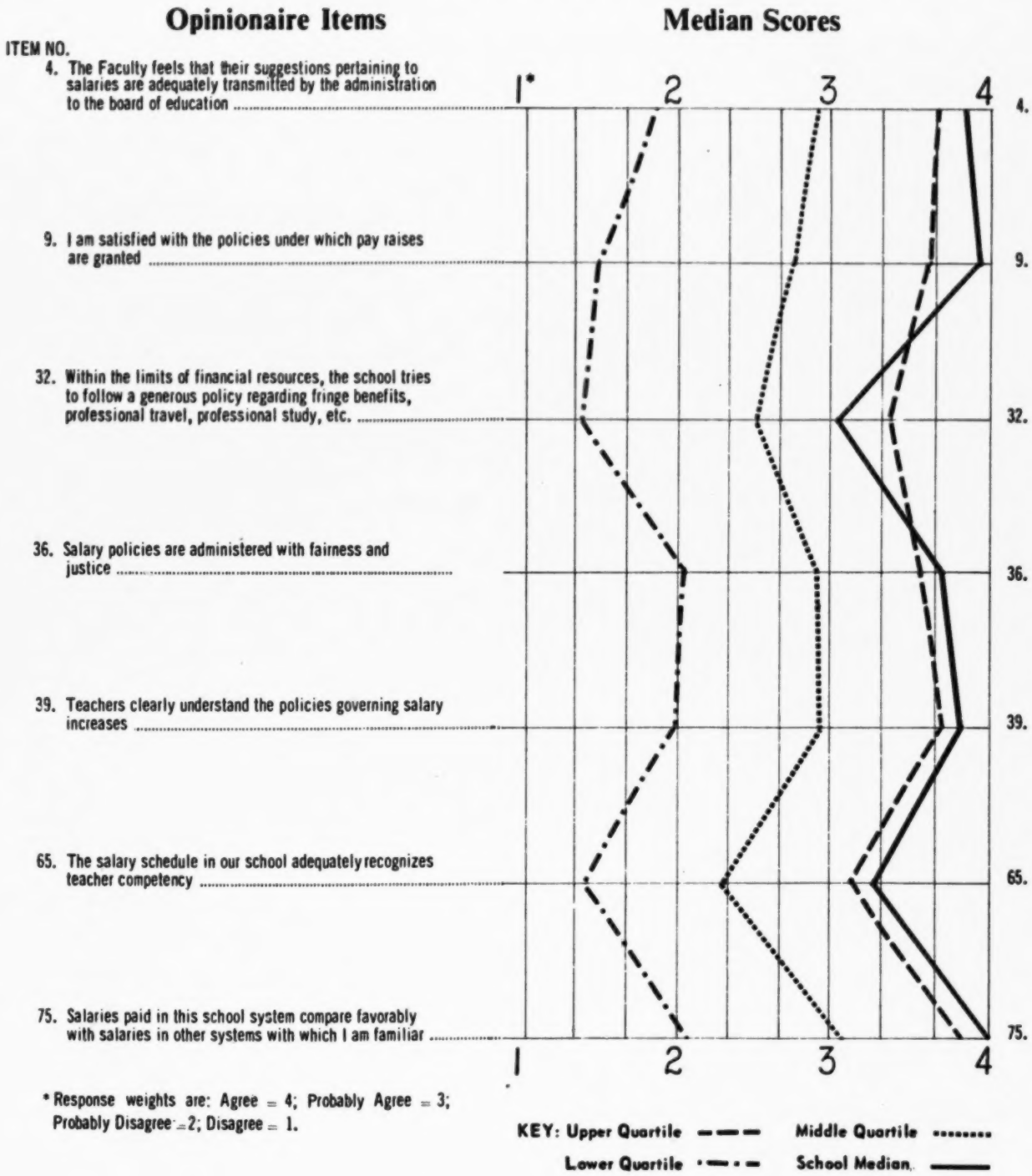
RAPPORT AMONG TEACHERS


ITEM NO.
Opinionaire Items
Median Score
1*
2
3
4
18.** There is a great deal of griping, arguing, taking sides and feuding among our teachers
22. Generally, teachers in our school do not take advantage of one another
23. The teachers in our school cooperate with each other to achieve common, personal, and professional objectives
28. Experienced faculty members accept new and younger members as colleagues
48. The competency of the teachers in our school compares favorably with that of teachers in other schools with which I am familiar
52. Our teaching staff is congenial to work with
53. My teaching associates are well prepared for their jobs
54. Our school faculty has a tendency to form into cliques
55. The teachers in our school work well together
77. The cooperativeness of teachers in our school helps make my work more enjoyable
80. The teachers in our school have a desirable influence on the values and attitudes of their students
84. Other teachers in our school are appreciative of my work
87. The teachers with whom I work have high professional ethics
90. The teachers in our school show a great deal of initiative and creativity in their teaching assignments
18.
22.
23.
28.
48.
52.
53.
54.
55.
77.
80.
84.
87.
90.
1
2
3
4
KEY: Upper Quartile
Middle Quartile
Lower Quartile
School Median

*When "Agree" is the keyed response, weights are: Agree = 4; Probably Agree = 3; Probably Disagree = 2; Disagree = 1. When "Disagree" is the keyed response, weights are: Disagree = 4; Probably Disagree = 3; Probably Agree = 2; Agree = 1.

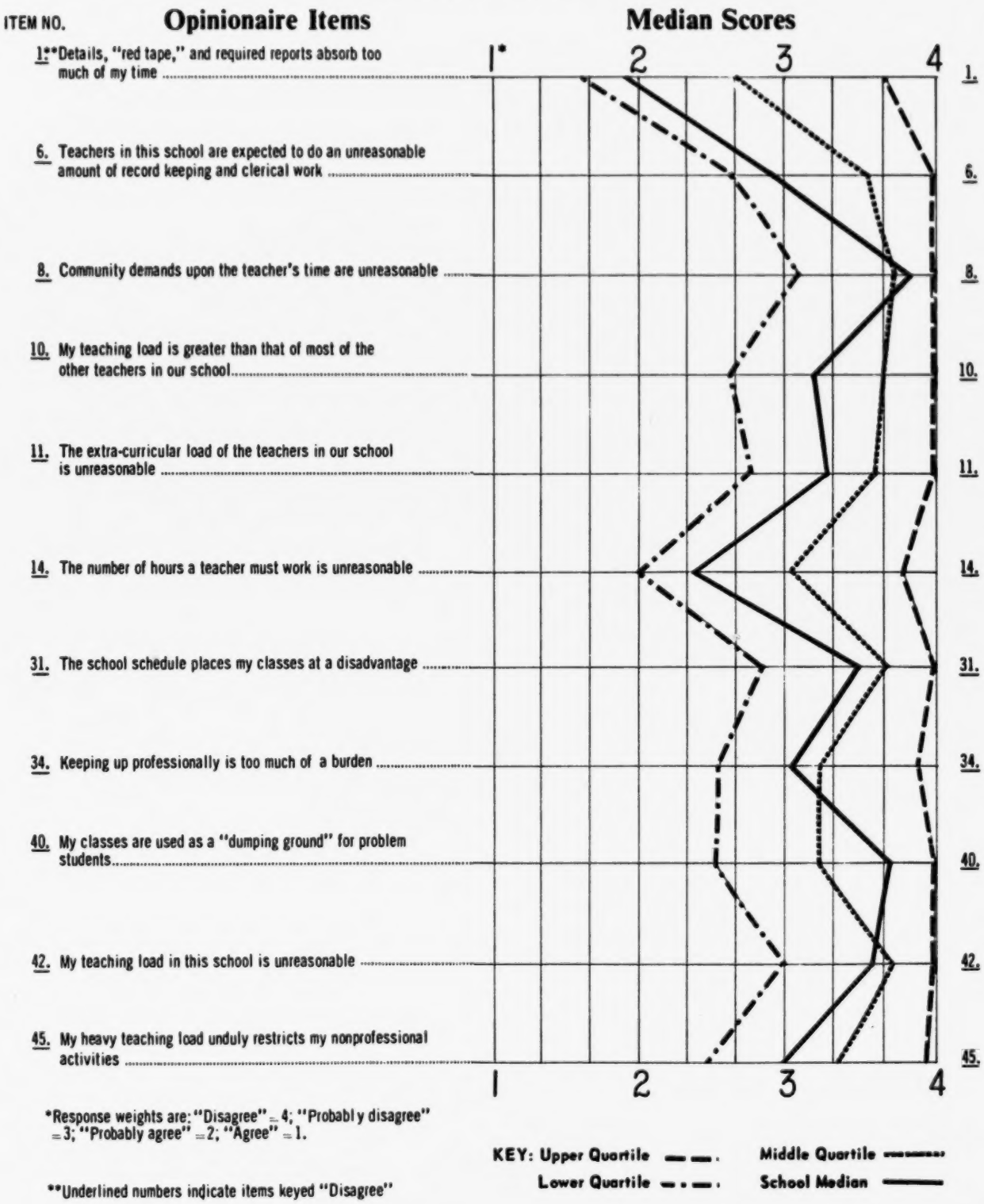
**Underlined numbers indicate items keyed disagree.

TEACHER SALARY


Opinionaire Items
Median Scores
ITEM NO.
4. The Faculty feels that their suggestions pertaining to salaries are adequately transmitted by the administration to the board of education
9. I am satisfied with the policies under which pay raises are granted
32. Within the limits of financial resources, the school tries to follow a generous policy regarding fringe benefits, professional travel, professional study, etc.
36. Salary policies are administered with fairness and justice
39. Teachers clearly understand the policies governing salary increases
65. The salary schedule in our school adequately recognizes teacher competency
75. Salaries paid in this school system compare favorably with salaries in other systems with which I am familiar
1* 2 3 4
4.
9.
32.
36.
39.
65.
75.
1 2 3 4
KEY: Upper Quartile
Middle Quartile
Lower Quartile
School Median

* Response weights are: Agree = 4; Probably Agree = 3; Probably Disagree = 2; Disagree = 1.

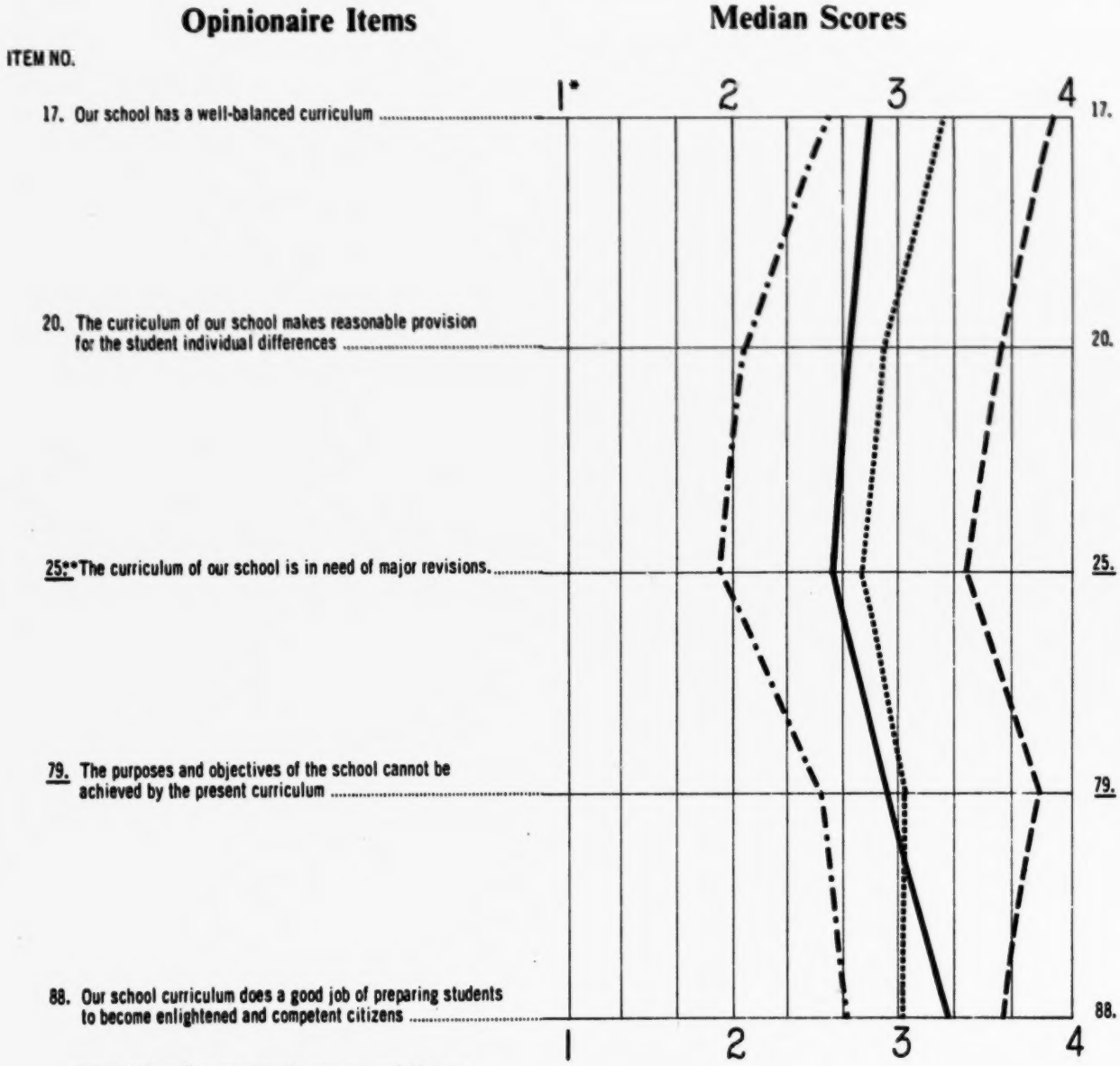
TEACHER LOAD


ITEM NO.
Opinionaire Items
Median Scores
1 2 3 4
1.* Details, "red tape," and required reports absorb too much of my time
6. Teachers in this school are expected to do an unreasonable amount of record keeping and clerical work
8. Community demands upon the teacher's time are unreasonable
10. My teaching load is greater than that of most of the other teachers in our school
11. The extra-curricular load of the teachers in our school is unreasonable
14. The number of hours a teacher must work is unreasonable
31. The school schedule places my classes at a disadvantage
34. Keeping up professionally is too much of a burden
40. My classes are used as a "dumping ground" for problem students
42. My teaching load in this school is unreasonable
45. My heavy teaching load unduly restricts my nonprofessional activities
1 2 3 4
KEY: Upper Quartile
Middle Quartile
Lower Quartile
School Median

*Response weights are: "Disagree" = 4; "Probably disagree" = 3; "Probably agree" = 2; "Agree" = 1.

**Underlined numbers indicate items keyed "Disagree"

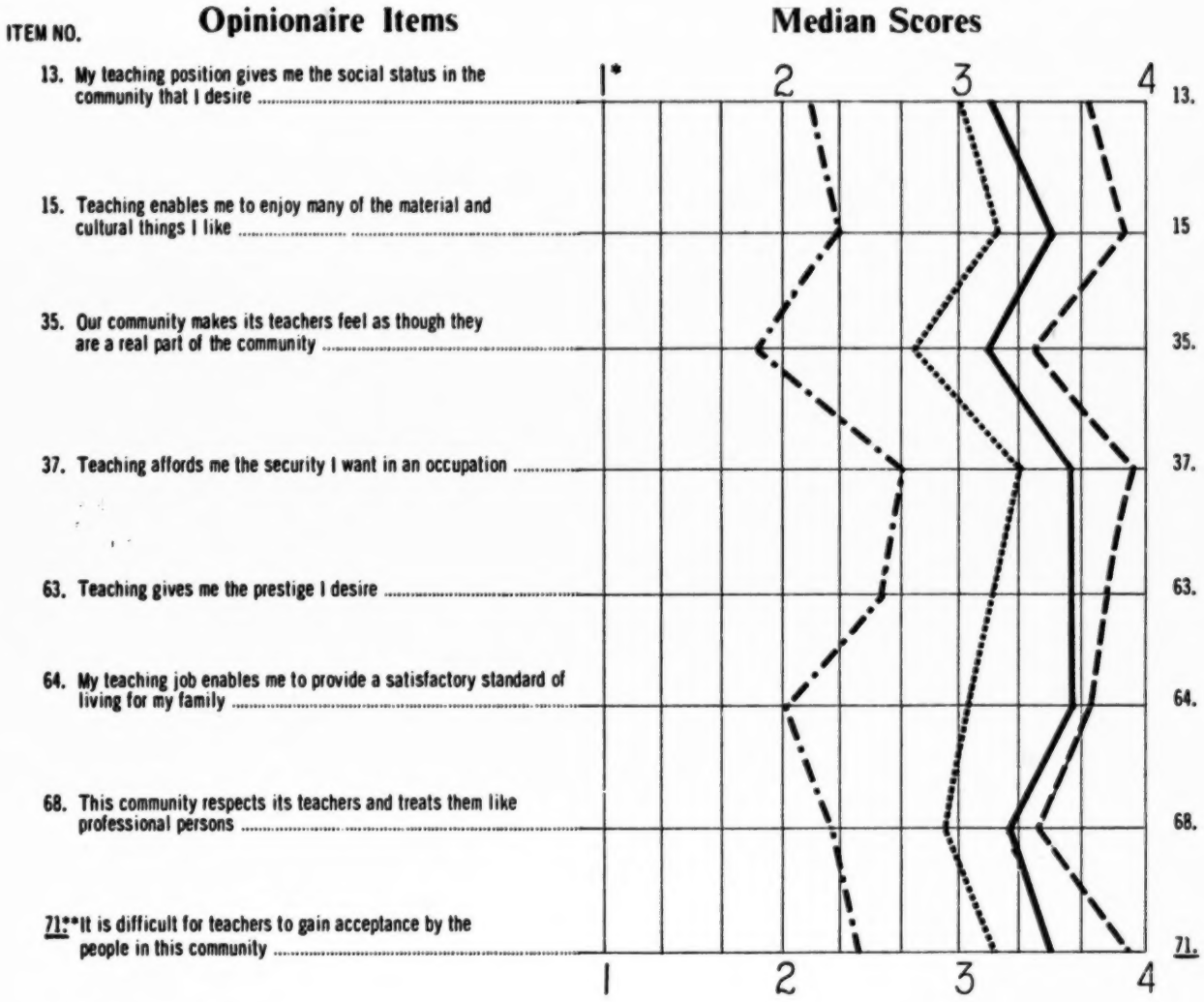
CURRICULUM ISSUES



*When "Agree" is the keyed response, weights are: Agree = 4; Probably Agree = 3; Probably Disagree = 2; Disagree = 1. When "Disagree" is the keyed response, weights are: Disagree = 4; Probably Disagree = 3; Probably Agree = 2; Agree = 1.

**Underlined numbers indicate items keyed "Disagree."

TEACHER STATUS

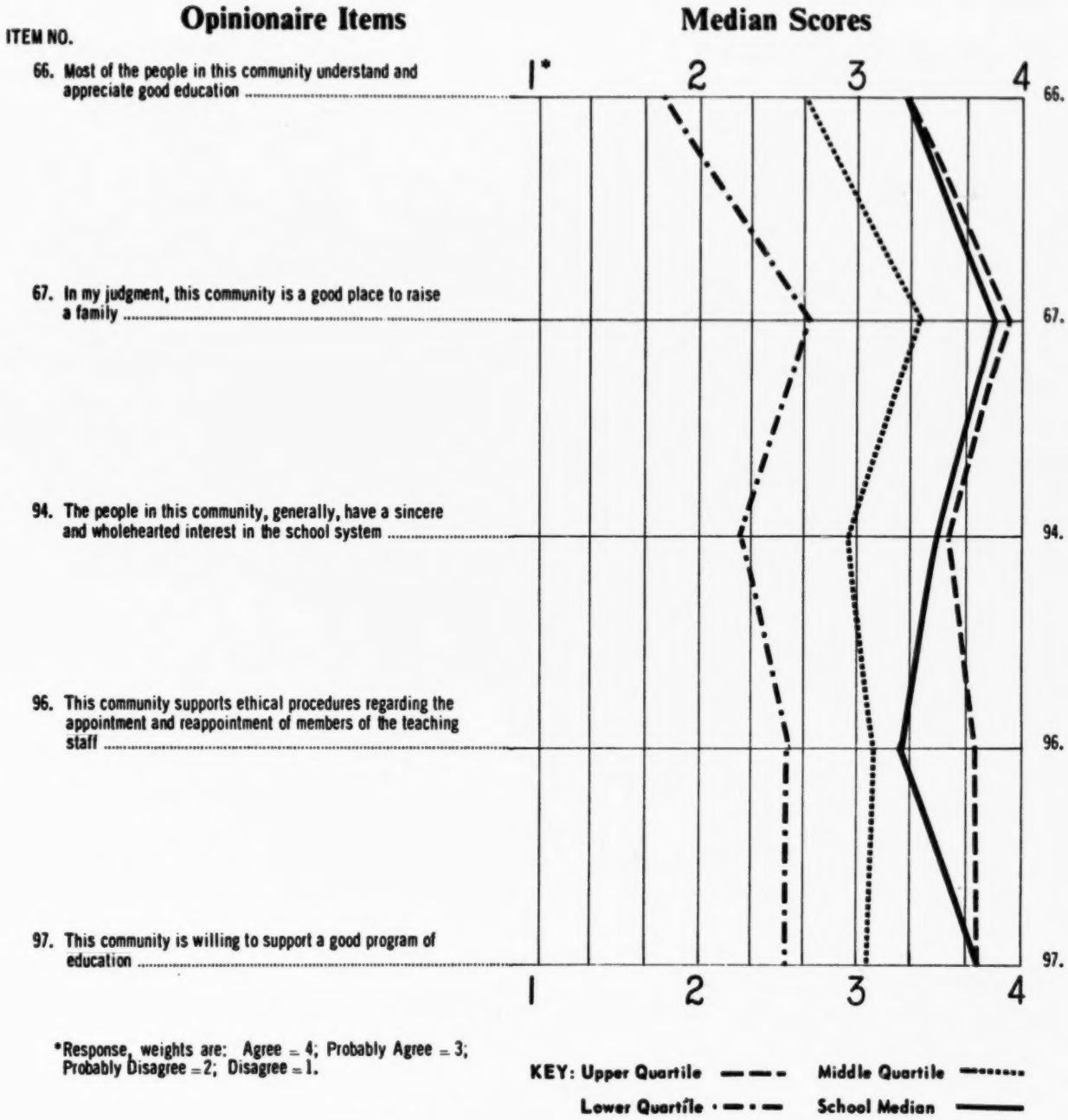

ITEM NO.
Opinionaire Items
Median Scores
1*
2
3
4
13. My teaching position gives me the social status in the community that I desire
15. Teaching enables me to enjoy many of the material and cultural things I like
35. Our community makes its teachers feel as though they are a real part of the community
37. Teaching affords me the security I want in an occupation
63. Teaching gives me the prestige I desire
64. My teaching job enables me to provide a satisfactory standard of living for my family
68. This community respects its teachers and treats them like professional persons
71:**It is difficult for teachers to gain acceptance by the people in this community
13.
15
35.
37.
63.
64.
68.
71.
1
2
3
4

*When "Agree" is the keyed response, weights are: Agree = 4; Probably Agree = 3; Probably Disagree = 2; Disagree = 1. When "Disagree" is the keyed response, weights are: Disagree = 4; Probably Disagree = 3; Probably Agree = 2; Agree = 1.

**Underlined numbers indicate items keyed "Disagree."

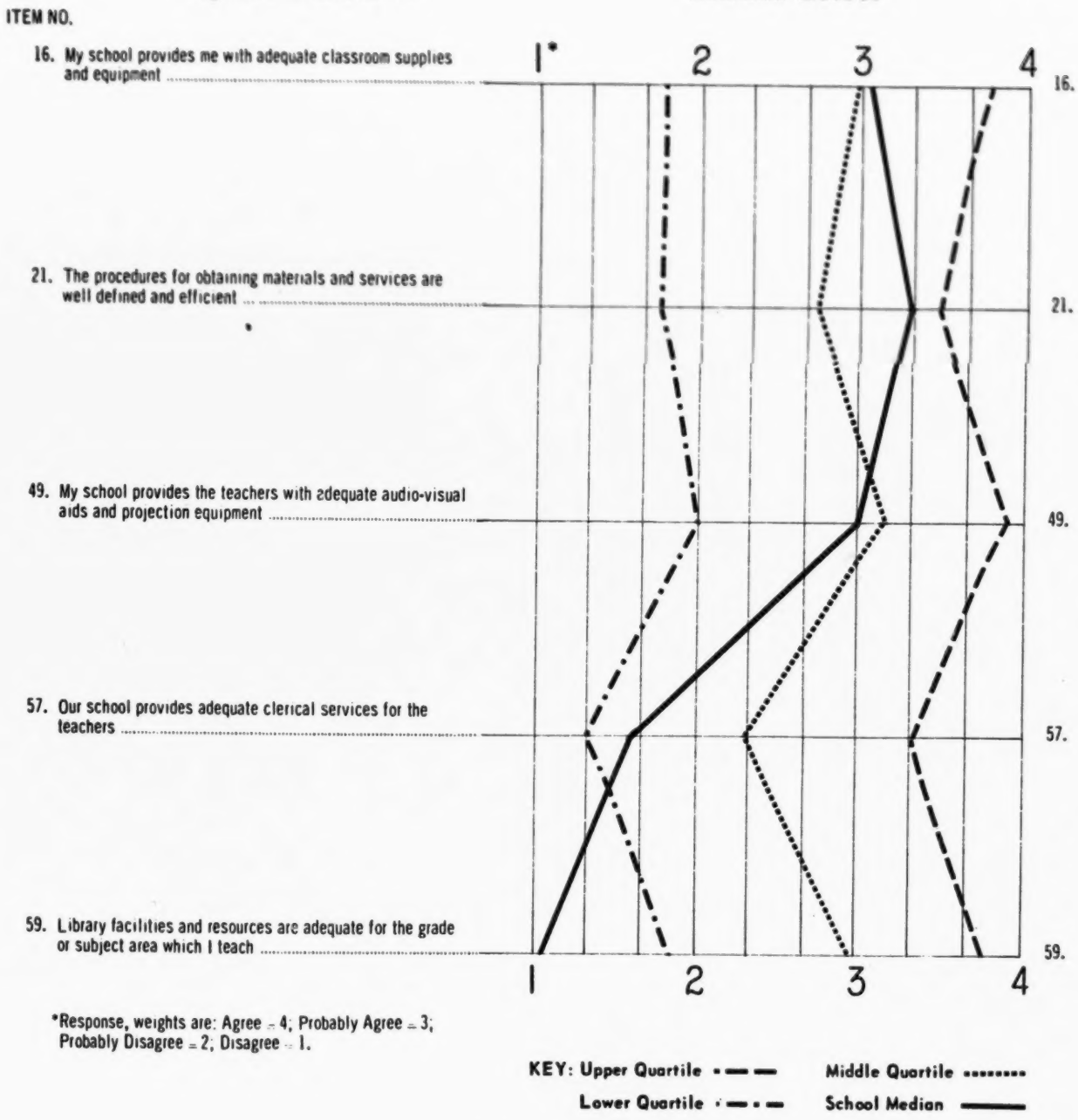
KEY: Upper Quartile — Middle Quartile ····· Lower Quartile — School Median

COMMUNITY SUPPORT OF EDUCATION


Opinionaire Items
ITEM NO.
66. Most of the people in this community understand and appreciate good education
67. In my judgment, this community is a good place to raise a family
94. The people in this community, generally, have a sincere and wholehearted interest in the school system
96. This community supports ethical procedures regarding the appointment and reappointment of members of the teaching staff
97. This community is willing to support a good program of education
Median Scores
1*
2
3
4
66.
67.
94.
96.
97.
1
2
3
4
KEY: Upper Quartile
Middle Quartile
Lower Quartile
School Median

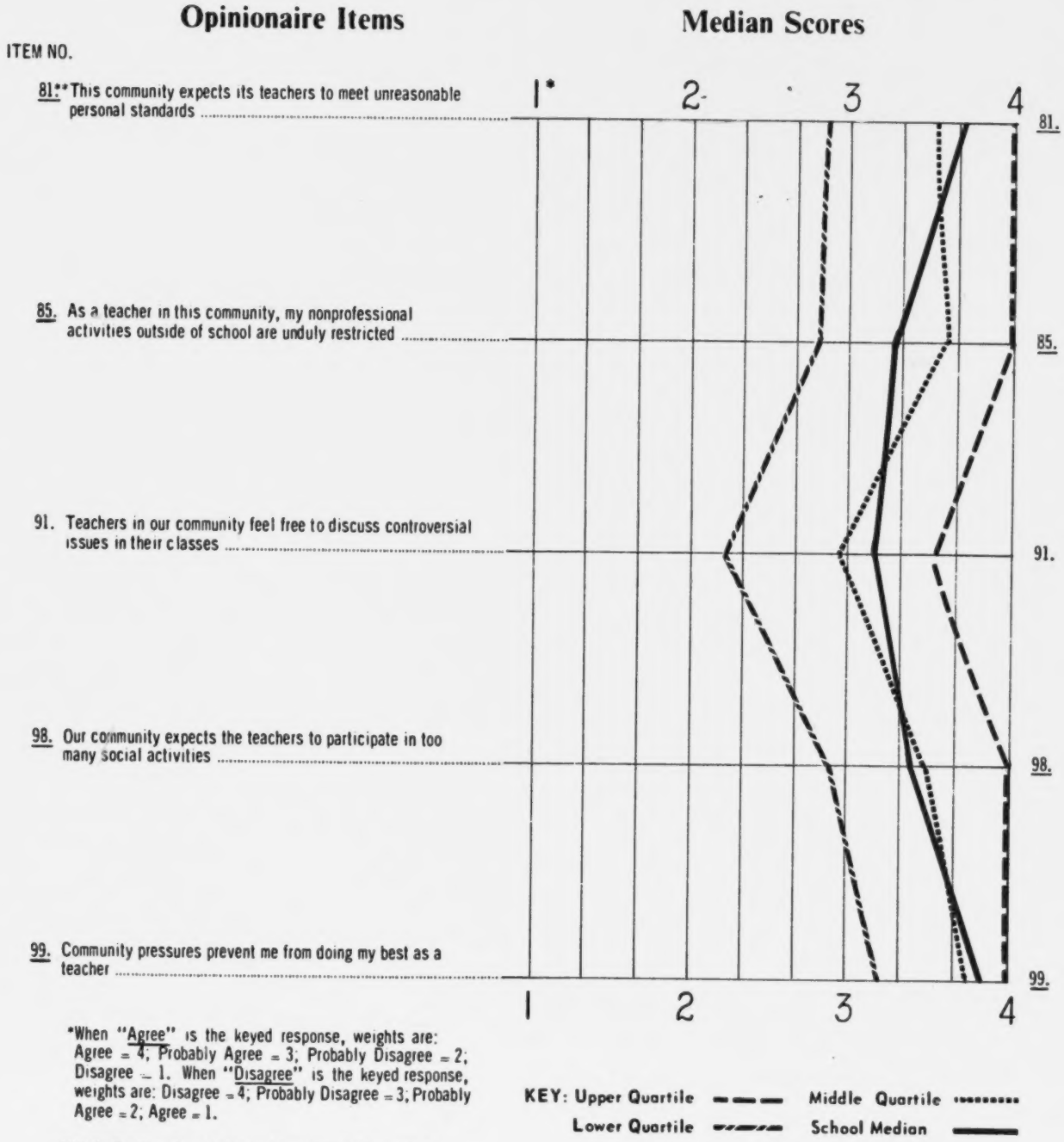
*Response, weights are: Agree = 4; Probably Agree = 3; Probably Disagree = 2; Disagree = 1.

SCHOOL FACILITIES AND SERVICES



*Response, weights are: Agree = 4; Probably Agree = 3; Probably Disagree = 2; Disagree = 1.

COMMUNITY PRESSURES



*When "Agree" is the keyed response, weights are: Agree = 4; Probably Agree = 3; Probably Disagree = 2; Disagree = 1. When "Disagree" is the keyed response, weights are: Disagree = 4; Probably Disagree = 3; Probably Agree = 2; Agree = 1.

**Underlined numbers indicate items keyed "Disagree"

APPENDIX C

LIST OF COOPERATING SCHOOLS, PRINCIPALS, AND SUPERINTENDENTS

List of Cooperating Schools, Principals, and Superintendents

INDIANA

High School	Principal	Superintendent
Adams Central	Carl Honaker (65-66) James P. Engle (66-67)	A. F. Allen
Anderson	Noel B. Douglas	G. Everett Ebbertt
Ashley	Leland R. Fee	James R. Watson
Attica	John G. Johnson (65-66) Richard Kirkpatrick (66-67)	John C. Pickell
Auburn	Tilson L. King	James R. Watson
Bloomington	Joseph M. Cull	Lawrence F. Reed (65-66) Ronald E. Walton (66-67)
Brownstown	Hal V. Driver	William B. Sharp
Carmel	Dale Graham	Forrest M. Stoops
Centerville	Henry Smith	Don Kehoe
Charlestown	Robert Myers	Allen W. Cochran
Clay (South Bend)	Bert Hodge	Alex Jardine (65-66) Charles C. Holt (66-67)
Clinton Central	Harlan A. Miller	Richard W. Falls
Connersville	Glenn Ross	John M. Houghland
Crown Point	Ray M. Rogers	Robert J. Brannock
Decatur Central	Homer L. Warner	Robert F. Gladden
Edinburg	Robert H. Gingher (65-66) Robert Alexander (66-67)	Lewis S. Jacob
Frankton	Gene Heniser	Dale Prough
Greencastle	N. B. McCammon	William M. Clary (65-66) Joseph A. Rammel (66-67)
Hamilton Heights	Hubert Haynes	Dallas L. Hohnstreiter
Hartford City	Charles N. Street	Wayne T. Hayes
Hobart	Harold Moody	Kenneth E. Norris
Jeffersonville	Harold Strycker	Ronald E. Walton (65-66) Robert L. Metcalf (66-67)
Kendalville	Royal Tritch	Edgar B. Redman
Knox	Roger Laramore	Ralph P. Harbison
Larwill	Don Guilford (65-66) Roger Schnepf (66-67)	R. W. Strumm
Lawrenceburg	H. P. Harrison (65-66) Fred L. Schmits (66-67)	H. P. Harrison

High School	Principal	Superintendent
Maconaquah	James D. Fulford (65-66) Carl Honoker (66-67)	Ray L. Geyer
Manchester	Kenneth Dunnuck	V. A. Simmons
Marion	Arnold W. Spilly	Bernard K. McKenzie
Martinsville	Henry E. Pearcy	Cyrus L. Gunn (65-66) Bruns F. Lupato (66-67)
Milan	Walter Howard	Elmer O. Heller
Monroe Central	John K. Wright (65-66) Merle Byran (66-67)	Paul H. Beck
Mooresville	Kendall R. Keller	William R. Curry
New Carlisle	Amzie K. Miller, Jr.	Leo W. Arvin
North (Evansville)	Adrian L. Meadows	Herbert Erdmann
Northfield (Wabash Co.)	Wilbur Dawes	Ira L. Huntington
North Vernon	Charles Hurley	Robert N. Powell
Northwestern (Howard Co.)	George R. Davis (65-66) Henry Whitmer (66-67)	George R. Davis
Paoli	Harry E. Knotts	Charles W. Mikels
Peru	Clyde Allmon	F. E. Goodnight
Plymouth	Marvin Odom (65-66) Donald Slauter (66-67)	William K. Bugher (65-66) Marvin Odom (66-67)
Rensselaer	Richard E. Roberts	Harold J. Haughes
Richmond	Robert L. Metcalf (65-66) Harold B. Hanes (66-67)	Paul C. Garrison
Rockville	Harold R. Sharpe	Russell Garrigus
Scottsburg	Clifford H. Kinney	Merrill W. Scott
Seager Memorial	James M. Schopmeyer	Olin Swinney
Selma	Joseph Naumcheff	Paul L. Parker
Seymour	Robert T. Burton	Robert B. Bulleit
Sheridan (Hamilton Co.)	Byron E. Stout	John F. Crick (65-66) John E. Bluom (66-67)
Short (Union Co.)	James A. Cummins	P. A. Smith
Silver Creek	Joe A. Pitman	Herman E. Meller
Southside (Muncie)	Claude B. Williams	N. Durward Cory
Tipton	Charles Edwards, Jr.	Vincent R. Guenther
Union City	Robert J. Shank	Dee Hand (65-66) P. A. Smith (66-67
Wabash	William Crockett	Walter Kent
Waterloo	Ned McIntosh	James R. Watson
Western (Howard Co.)	Donald Hanna	Richard Rea
Winamac	Harry Cords	Lamoin Nice
Woodlan	Jack Lee	Paul Harding
Zionsville	Oliver L. Warner	

OREGON

High School	Principal	Superintendent
Baker	Art Brown	J. R. Evans
Bend	Ray Talbert (65-66) Donald Brown (66-67)	R. E. Jewell
Hermiston	Jack Jenkins	Armand Larive
Hillsboro	James Davis	Alton Smedstad
La Grande	Dale Wyatt	Ronald Walk
Milton-Freewater	John W. Turbyne	John Thrasher
Milwaukie	Jerome Lillie	Owen Sabin
Nyssa	Gene Chester	W. L. McPartland
Ontario	Robert McConnaha	Maurice Irons
Parkrose	John Anderson	Melvin Barnes
Pendleton	Don Fossatti	Ellis Neal
Prineville	Lloyd Lewis	Alfred Haberly
The Dalles	Ernest Davenport (65-66) John Turnbow (66-67)	Alvin Unruh
Vale	Gerald Cammann	Gerald Cammann
West Linn	Charles Zaccur	Chester Tunnell
Wy'East (Hood River)	Charles Bowe	Arnold Bowers